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Exploring the Effects of Generation and Leadership Style on Nurses' Organizational Commitment

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Walden University

College of Health Professions

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Kim Hedley

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Walden University
2021

Abstract

Exploring the Effects of Generation and Leadership Style on Nurses' Organizational Commitment

by

Kim M. Hedley

MS, Nursing, Sage Graduate School, 1994

BS, Nursing, Sage College, 1991

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Nursing Leadership

Walden University

November 2021

Abstract

There is an impending shortage of nurses; therefore, healthcare leaders must use strategies that promote staff nurses' organizational commitment (OC) to retain a clinically competent workforce. The purpose of this quantitative descriptive cross-sectional study guided by the transformational leadership theory and generational theory was to determine whether OC differs according to generational cohort (GC) and leadership style (LS) and then explore the combined effects of GC and LS on staff nurses' OC. One-hundred sixty acute care staff nurses in the United States responded to the survey that included the Multifactor Leadership Questionnaire 5x-Short and Three-Component Model Employee Commitment Survey. A one-way ANOVA and general linear modeling were used to examine the research questions. Results revealed that OC does differ according to preferred LS for affective ($p < 0.001$) and normative commitment ($p < 0.001$). In addition, LS is a significant predictor of staff nurses' OC ($p < 0.001$). There were no differences in terms of OC between GC, and GC did not predict OC. Results suggest that the use of transformational and transactional leadership styles may promote staff nurses' affective and normative commitment. This may increase job satisfaction, reduce intent to leave an organization, assist in the retention of a clinically competent workforce, and improve patient satisfaction; in turn, this will improve practice and promote positive social change. Future studies should be conducted that control for possible confounders that might influence the relationship between GC, LS, and OC.

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Dedication

This doctoral study is dedicated to my parents, Lonny and Beverly Lanteigne. They saw in me what I did not see in myself, and I would not be a nurse if it were not for them. I also dedicate this study to my husband Kevin, and sons, Joseph and Alexander. Thank you for your love, words of encouragement, ongoing support, patience, and understanding throughout this journey. Kevin, thank you for always being there and believing in me; you gave me the strength and inspiration to complete the Ph.D. journey.

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Chapter 1: Introduction to the Study

Introduction

The current nursing workforce spans over five generations (Silent Generation [1928-1945], Boomer Generation [1946-1964], Generation X [1965-1980], Generation Y [1981-1996], and Generation Z [1997-2012]) and includes approximately 2,986,500 registered nurses (RNs), 30.9% of whom work in general medical and surgical hospitals (U.S. Bureau of Labor Statistics [BLS], 2021a), as well as 676,440 licensed practical nurses (LPNs) or licensed vocational nurses (LVNs), with 1.44% working in general medical and surgical hospitals (BLS, 2021b). Despite over 3.6 million nurses in today's workforce, there is an impending shortage of nurses due to the aging of the Boomer Generation (Buerhaus et al., 2017c), decreased enrollments in nursing programs (American Association of Colleges of Nursing [AACN], 2020), departure of nurses from the workforce due to burnout, violence, staffing ratios, technology, and family commitments (Auerbach et al., 2015), and the need for nurses to care for the projected 82 million individuals who will be age 65 and over by 2030 (U.S. Census Bureau, 2020).

Nurses left the workforce at a rate 40,000 in 2010 and it is predicted that this will double with an expected 80,000 in 2020 (Auerbach et al., 2015). At least one million nurses are scheduled to retire by 2030, resulting in a loss of experienced RNs in the U.S. nursing workforce (Buerhaus et al., 2017a; Buerhaus et al., 2017b; Buerhaus et al., 2017c). As a result, the BLS projects that the number of openings for RNs will be greater than 200,000 per year between 2016 and 2026 (Torpey, 2018).

Some nurses are aging out of the workforce, while other nurses are leaving the workforce voluntarily. In order to address the nursing shortage, nurse leaders are challenged to retain as many nurses as possible while recruiting new nurses, which may be accomplished through the promotion of organizational commitment (OC; Bowles et al., 2018; Feeley, 2017; Im et al., 2016). OC is defined as "a psychological state that (a) characterizes the employee's relationship with the organization, and (b) has implications for the decision to continue or discontinue membership in the organization" (Meyer & Allen, 1991, p. 67). OC has been positively associated with nurses' job satisfaction (Kim et al., 2018; Salem et al., 2017), clinical competence (Khodadadei et al., 2016), and caring behaviors (Naghneh et al, 2017), along with patient satisfaction (Murale et al., 2015). Additionally, OC is associated with transformational (Jain & Duggal, 2016) and transactional (Sayadi, 2016) leadership styles (LS), and generational cohorts (GC) have been found to influence organizational commitment (Agrawal, 2017; Beecroft et al, 2008; Benson et al., 2018; Mazurenko et al., 2015). Conversely, OC has been negatively correlated with nurses' intent to leave an organization (Church et al., 2018).

Chapter 1 includes a provide a brief overview of the study and background information. The problem statement, purpose of the study, research questions, theoretical framework, nature of the study, and definitions of the variables are explained. Lastly, assumptions, scope and delimitations, limitations, significance, and a summary are discussed.

Background

A decrease in OC among nurses is associated with higher rates of turnover (Yurumezoglu et al., 2019) and decreased retention (Im et al., 2016). Moreover, recent studies have linked OC to work engagement (Gupta et al., 2016; Santos et al., 2016), empowerment (Gholami et al., 2019), and social responsibility (Hsieh et al., 2019). Professional growth (Im et al., 2016), autonomy (Labrague et al., 2019; Lin & Chang, 2015; Miedaner et al., 2018), and job satisfaction (Dinc & Huric, 2017) were also noted.

Likewise, studies of nurses' OC by GC conducted throughout the world have revealed generational differences but there is a variation in the findings (Choi et al., 2020; Christopher et al, 2018; Deng, 2018; Stewart et al., 2017; Volkova et al., 2019). Recent studies of nurses' OC and LS revealed Leaders use transformational (Jain & Duggal, 2016; Majid & Cohen, 2015) and transactional (Makhathini & Van Dyk, 2018; Sayadi, 2016) LSs promote OC by emulating best practices, focusing on the needs of followers and promoting a positive work environment.

While the literature has examined the effects of GC and OC (Choi et al., 2020; Christopher et al, 2018; Deng, 2018; Stewart et al., 2017; Volkova et al., 2019), and LSs and OC (Jain & Duggal, 2016; Makhathini & Van Dyk, 2018), there is little in the literature examining the combined effects of GC and LS in terms of predicting staff nurses' OC within the current nursing workforce. Therefore, results of this study will provide information regarding the newest generation of nurses, Generation Z, as well as the collective effects of GCs and LSs on the current nursing workforce.

Problem Statement

There are five generations in today's nursing workforce and each generation brings its own values, beliefs, and experiences to the workplace (Fry, 2018; Pew Research Center [PRC], 2015). The composition of the nursing workforce consists of Silent Generation (3%), Boomer Generation (32%), Generation X (39%), and Generation Ys (26%; Moore et al., 2016), and with the following age groups: less than 30 (8.5%), 30-39 (22.2%), 40-54 (31.5%), and 55-64 (23.9%; U.S. Department of Health and Human Services [DHHS] et al., 2019). The involvement of Generation Z is yet to be determined as this group is new to the nursing workforce. Given the unique characteristics of these five generations, nurse leaders are challenged with understanding the needs and expectations of each individual group to promote OC, which in turn may improve retention.

Several studies have found an association between OC and LS among nursing staff. For example, nurses OC is positively correlated with the nurse manger's use of transactional leadership skills (Asiri et al., 2016). Similarly, Wei et al. (2016) posited that leaders who used the leaders-member exchange LS promotes the development of relationships and influences higher OC among nurses. More recently, leaders that demonstrate transformational and transactional leadership are associated with increased OC of staff (Dahshan et al., 2017). Orgambidez and Almeida (2018) suggest nurses have increased affective commitment when the leader uses transformational leadership skills, specifically being supportive.

Similarly, da Silva et al. (2015) found that the Boomer Generation appreciate the values of the organization, while members of Generation X are doubtful of organizational hierarchies, and Generation Ys favor personal satisfaction over OC. Thus, it may be concluded that the Boomer Generation have a higher OC as compared to Generation X and Generation Ys. Agrawal (2017) studied Generation X and Generation Y employees and found that OC is influenced by the personality traits of Generation X employees but not Generation Y.

Moreover, studies indicate that Generation Y are more committed to organizations when they are rewarded (Stewart et al., 2017), happy, entertained, and working in teams (Civelek et al., 2017). Glazer et al. (2019) identified that supporting employee development promotes greater OC in Generation Y when compared to Generation X. While literature supports the generational differences between the Boomer Generation, Generation X, and Generation Y, the literature is limited on Silent Generation and Generation Z nurses. Few members of the Silent Generation remain in the workforce, while Generation Z nurses are new to the workforce and have yet to be studied.

Thus, as demonstrated, it is known that specific LSs (Asiri et al., 2016; Dahshan et al., 2017; Wei et al., 2016) are associated with different levels of OC among nursing staff. It is also known that GC influences OC (Agrawal, 2017; Beecroft et al, 2008; Benson et al., 2018; da Silva et al., 2015; Mazurenko et al., 2015; Yang & Wei, 2019) but evidence is limited involving the combined effects of GC and LS on OC among nurses.

Purpose of the Study

The purpose of this quantitative descriptive cross-sectional study is first to determine whether OC differs according to LS and GC individually and then explore the combined effects of GC and LS on staff nurses' OC. The dependent variable (DV) in this study is OC, and the independent variables (IVs) are GC and LS. OC was measured on a continuous in nature and measured using an interval scale, while GC and LS are both categorical in nature and were measured using a nominal scale.

Research Questions

The following central research questions (RQs) are addressed in the study:

RQ1: Is there a difference in staff nurses' organizational commitment (affective, continuance, and normative) by generational cohort?

$H_0$1: There is no difference in staff nurses' organizational commitment (affective, continuance, and normative) by generational cohort.

H_a1: There is a difference in staff nurses' organizational commitment (affective, continuance, and normative) by generational cohort of staff nurses.

RQ2: Is there a difference in staff nurses' organizational commitment (affective, continuance, and normative) based on leadership style?

$H_0$2: There is no difference in staff nurses' organizational commitment (affective, continuance, and normative) based on leadership style.

H_a2: There is a difference in staff nurses' organizational commitment (affective, continuance, and normative) based on leadership style.

RQ3: What is the combined effect of generational cohort and leadership style in predicting staff nurses' organizational commitment (affective, continuance, and normative)?

$H_0$3: Generational cohort and leadership style are not predictors of staff nurses' organizational commitment (affective, continuance, and normative).

H_a3: Generational cohort and leadership style are predictors of staff nurses' organizational commitment (affective, continuance, and normative).

Theoretical Foundation

There are two frameworks for this study: the transformational leadership theory (TLT) and Strauss-Howe generational theory (GT). The TLT is a middle range theory developed by Burns and Bass. Burns (1978) studied policitial leaders and found that leaders who work with followers are able to increase followers motivational level. Burns assserted transforming leaders create change and transactional leaders use give and take negotiation tactics with staff to achieve organizational goals. Bass (1985) expanded on Burns work and found that leaders may use a combination of transformational and transactional leadership skills to motivate staff. The specific skills are inspirational motivation, idealized influence, intellectual stimulation, and individual consideration. The skills are defined in Chapter 2.

The TLT was selected as a framework for this study because it has been used in multiple disciplines, key concepts have been studied and validated, and the framework includes a systematic approach to explore nurses' OC based on GC and LS. The TLT has been used for quantitative research, and concepts were measured using the Multifactor

Leadership Questionnaire (MLQ) 5x-Short rater form. Items from the MLQ are included in this study's questionnaire to assist in answering RQ2 and RQ3. The TLT, key concepts, and its application to this study are discussed in greater detail in Chapter 2.

GT was developed by William Strauss and Neil Howe beginning in the 1980's (LifeCourse, 2020a). Strauss and Howe (1991) identified a connection between history and generations; most specifically, there are four generational archetypes (prophet, nomad, hero, and artist) that occur and repeat in a cycle of four turnings. The four turnings comprise a saeculum, or full cycle, that lasts approximately 80 years (LifeCourse Associates, 2020c). The turnings include the high (first turning), awakening (second turning), unraveling (third turning), and crisis (fourth turning). Each turning lasts approximately 20 years (LifeCourse Associates, 2020c). A more detailed description of the concepts will be provided in chapter 2.

The GT was selected as a framework for this study because it provides an outline to help understand the uniqueness of each GC as I seek to determine combined effects of GC and LS on staff nurses' OC. The GT is a predictive model that how each generation changes and transform a community, state, and nation (LifeCourse Associates, 2020b). The archetypes and turnings have been used consistently in the literature since the publication of GT by Strauss and Howe in 1991. The key concepts of GT and its application to this study are discussed in greater detail in Chapter 2.

Nature of the Study

This study involved using a quantitative descriptive cross-sectional design. The quantitative approach was selected because my intent was to explore the effects of GC

and LS on nurses' OC. Measuring the effects of an independent variable on a dependent variable requires the use of quantitative research methods (Gray et al., 2017). The cross-sectional design was chosen because this study did not involve the use of control groups and the data were captured at one point in time (Creswell & Creswell, 2018). The DV in this study is OC and the IVs are GC and LS. OC is continuous in nature and was measured using an interval scale while GC and LS are both categorical in nature and were measured using a nominal scale.

Data were collected from staff nurses located nationally in the U.S. who reported working in the acute care setting. The survey tool was distributed electronically using SurveyMonkey. The survey included a demographic question (see Appendix B) to assist in describing the sample followed by two instruments used to measure the DV and IVs. LS was measured using the 45-item MLQ 5x-Short rater form (MLQ 5x-Short), and OC was measured using the revised version of the three-component model (TCM) employee commitment survey (Meyer, et al., 1993) that includes 18 items. The MLQ 5x-Short (Alloubani et al., 2019; Avolio & Bass, 2004; Boamah & Tremblay, 2019; Dimitrov & Darova, 2016; Flemming, 2017; Keller & Weibler, 2015; Khali, 2016, Kueenzi, 2019; Tyczkowski, 2015) and TCM employee commitment survey (Allen & Meyer, 1990; Bycio et al., 1995; Cohen, 1992; Dunham et al., 1994; Herscovitch & Meyer, 2002; Karim & Noor, 2006; Meyer & Allen, 1990; Meyer & Allen, 2004; Meyer et al., 1993; Mugizi et al., 2016; Sersic, 2000; Xu & Bassham, 2010) have been previously demonstrated to be reliable and valid.

Recruitment occurred via email and LinkedIn posts. Volunteers interested in participating in the study clicked on a link that led to the consent form.Volunteers who consented to participate were presented with a list of screening questions (see Appendix A); if exclusion criteria were met, the survey ended. All responses remained confidential, and results are presented in the aggregate. Descriptive statistics were used to describe the sample, and data were analyzed to answer each research questions using a one-way analysis of variance (ANOVA) for RQ 1 and 2, and a general linear model (GLM) for RQ 3.

Definitions

I used the following operational terms in this study:

Affective commitment (AC): AC is employees' attachment to organizations because they want to be there (Allen & Meyer, 1990). An employee with AC may feel the organization meets their needs and expectations (Meyer et al., 1990).

Boomer Generation: Also known as Baby Boomer Generation, these are individuals who were born between 1946 and 1964 (PRC, 2019). Their name is due to an increase in births following the end of World War II (Strauss & Howe, 1991).

Continuance commitment (CC): CC is based on employees' needs to be with the organization (Lee et al., 2001; Meyer et al., 1990). The employee makes the decision based on costs (salary and benefits) of staying versus leaving the organization (Allen & Meyer, 1990; Meyer & Allen, 1991; Meyer et al., 1993).

Generation: A generation is an age cohort that delineates groups of people over time (Dimock, 2019).

Generation X: Generation Xers were born between 1965-1980 (PRC, 2019), a period which is known as the Baby Bust due to the low number of births compared to the previous generation (PRC, 2015).

Generation Y: Generation Y were born between 1981 and 1996 (PRC, 2019). This period is known as the Echo Boom because those born during this generation are children of the Boomer Generation, and there was an increase in births (PRC, 2015).

Generation Z: Generation Z includes individuals born between 1997 and 2012 (PRC, 2019).

Leadership style (LS): LS is "the way in which a leader manages their workload and team, this involves their tendencies, methods, and mannerisms in their day-to-day responsibilities as the leader of the group" (Pam, 2013, para. 2).

Normative commitment (NC): NC occurs when an employee feels they have an obligation to stay with the organization (Allen & Meyer, 1990). This may be evident among employees who have developed relationships with one another or received benefits for which they feel the need to repay (Lee et al., 2001; Meyer et al., 1993).

Organizational commitment (OC): OC has been defined as "a psychological state that (a) characterizes the employee's relationship with the organization, and (b) has implications for the decision to continue or discontinue membership in the organization" (Meyer & Allen, 1991, p. 67).

Passive-avoidant leadership (PAL) style: PAL style is characterized as the absence of a LS, waiting for problems to arise to take action, and avoiding responsibility

(Bass, 1999). A sample item of the TCM that defines PAL is "talks optimistically about the future" (Avolio & Bass, 2004, p. 116).

Silent Generation: Also referred to as the Veteran Generation, these are individuals who were born between 1928 and 1945 (PRC, 2019). This is the oldest generation in the nursing workforce (Fry, 2018; PRC, 2019; Society for Human Resource Management [SHRM] Foundation, 2017).

Transactional leadership style (TAL): The TAL style is used by leaders to maintain followers' quality and performance, and to improve outcomes (Bass, 1985; Burns, 1978).

Transformational leadership style (TFL): The TFL style involves leaders inspiring, motivating, developing, and empowering followers (Fischer, 2016).

Assumptions

There are four assumptions of this study. The first assumption is that GCs share historical experiences and cultural trends that shape their attitudes towards work. The second assumption is that LSs vary by leader. The third assumption is that each participant responded honestly to items in the questionnaire. The final assumption was that the measurement tools used were reliable and valid for this population. The four assumptions are necessary to support the meaningfulness of the potential findings in the context of methods used in this study.

Scope and Delimitations

It is necessary for nurse leaders to understand the needs of the current workforce. There is little research regarding the combined effects of GC and LS on nurses' OC for

the current nursing workforce. An understanding of generational differences will allow nurse leaders to identify LSs that promote OC among staff, which in turn will help in terms of retaining a highly trained and competent nursing workforce.

There are delimitations in this study. I excluded nurses working outside of the United States, and nurses whose primary role was administrative. I also excluded nurses who provided care outside the acute care setting. Those groups were excluded because their primary roles did not include providing direct patient care to patients in the acute care setting.

Aside from the TLT and GT, the situational leadership theory was considered as a theoretical framework for this study. The situational leadership theory requires the leader to modify their LS based on the situation and understanding of followers' task behaviors, relationship behaviors, and maturity level (Hersey & Blanchard, 1977). As the employee learns and grows, there will be less need for support from the leader (Hersey & Blanchard, 1977). The situational leadership theory was not selected because the theory involves individual tasks and relationships needed to build employees' maturity levels, which may vary each time a new task is assigned. Whereas the TLT the emphasis on the leader's ability to level their emotions (Jain & Duggal, 2016), and leaders' role modeling of behaviors that allow followers to challenge the status quo (Bass, 1985; Bass 1990), and provide needed resources to grow (Allen et al, 2016; Bass et al., 2003; Groves, 2020).

Limitations

This study had potential limitations and challenges. The first limitation was the use of a questionnaire which could promote social desirability bias, a bias that occurs

when a respondent is not truthful in their responses, but answers with acceptable or politically correct responses (Fisher, 1993). Social desirability bias was reduced by explaining to participants that the survey would remain confidential, and all data would be presented in the aggregate. The cross-sectional design was selected as the intent was to look at one point in time, however, is limited in terms of its ability to determine cause and effect, an inherent threat to internal validity (Gray et al., 2017). The intent was to provide results that could be generalized to a larger population. External validity was enhanced by recruiting a sample from participating hospitals, four professional nursing organizations, the Florida Health – Health Care Practitioner Data Portal (Florida Health Portal), and LinkedIn. I used snowball sampling to increase my ability to generalize findings involving healthcare systems providing acute care services.

There were challenges in terms of obtaining data sharing agreements and Institutional Review Board (IRB) approval from participating hospitals as each hospital had its own requirements and expectations. To address these challenges, I worked with nurse leaders and in some cases IRB chairs prior to IRB meetings to ensure they had needed information to inform their decisions.

Significance

Prior studies have examined the relationship between GC and OC (Agrawal, 2017; Beecroft et al, 2008; Benson et al., 2018; da Silva et al., 2015; Mazurenko et al., 2015; Yang & Wei, 2019), as well as the relationship between LS and OC (Asiri et al., 2016; Dahshan et al., 2017; Wei et al., 2016) among nurses. However, this study is

unique in that it involved exploring collective effects of GC and LS on staff nurses' OC within the current nursing workforce consisting of five generations.

Hospital leaders must consider changing landscapes and understand that nurses are change agents (Salmond & Echevarria, 2017), which can assist leaders in terms of meeting organizational goals. This is evidenced by a positive correlation between nurses' OC and caring behavior (Naghneh et al., 2017), job satisfaction (Kim et al., 2018), clinical competence (Khodadadei et al., 2016), and patient satisfaction (Murale et al., 2015), and a negative correlation with the intent to leave an organization (Church et al., 2018).

Results of the study promote positive social change by providing information healthcare leaders can use to promote staff nurses' OC. Nurses who are committed to the organization have job satisfaction (Kim et al., 2018), exhibit caring behaviors (Naghneh et al., 2017), promote patient satisfaction (Murale et al., 2015), and remain with the organization (Church et al., 2018), which leads to the retention of a clinically competent workforce decreasing the nursing shortage (Bowles et al., 2018; Feeley, 2017).

Summary

There is an impending shortage of nurses, 40,000 left the profession in 2010 and 80,000 are expected to do the same in 2020 (Auerbach et al., 2015). It is imperative for nursing leaders to gain an understanding and working knowledge of needs of the multigenerational workforce to identify the most appropriate LSs and behaviors needed to promote OC and enhance nursing retention. This study included the Silent Generation and Generation Z, for which there are no current studies, as well as the Boomer

Generation, Generation X, and Generation Y cohorts who have been studied over the past 5 years.

In this chapter, the framework for this study on the combined effects of GC (IV) and LSs (IV) on nurses' OC (DV), was discussed. The three RQs and corresponding hypotheses were presented. I used two frameworks, the TLT and GT, to guide the study and assist in answering the RQs. Assumptions, scope and delimitations, and limitations and significance were explored. Last, implications for social change were discussed. Results of the study will promote positive social change by providing information healthcare leaders can use to promote nurses' OC. Chapter 2 includes an introduction, literature search strategies, details regarding the TLT and GT as theoretical frameworks, a review of literature that includes OC, GC, LS from a global perspective in nursing, and a summary and conclusions.

Chapter 2: Literature Review

Introduction

There are five generations in the modern nursing workforce (Fry, 2018; PRC, 2019), and each generation brings its own values, beliefs, and experiences to the workplace (PRC, 2015). Nonetheless, a shortage of nurses is impending. Reasons are varied and include a decrease in the number of students in nursing programs (AACN, 2019), aging of the large Boomer population which will be in need of healthcare services, and the aging nursing workforce, 40% of which is comprised of individuals who are 50 years or older (Auerbach et al. 2015; Buerhaus et al., 2017c; Haddad et al., 2020). Other factors also contribute to this impending shortage. 40,000 RNs left the workforce in 2010, with an expected 80,000 in 2020, due not only to age, but also burnout, violence, staffing ratios, technology, and family commitments (Auerbach et al., 2015). Data from BLS indicates that the projected number of openings for RNs will be greater than 200,000 per year between 2016 and 2026 (Torpey, 2018).

Nurse leaders are in a unique position to retain nurses by understanding characteristics of five generations and LSs that promote nurses' OC. It is known that OC differs according to GC (Agrawal, 2017; Beecroft et al, 2008; Benson et al., 2018; da Silva et al., 2015; Mazurenko et al., 2015; Yang & Wei, 2019), as well as specific LSs among nursing staff nursing staff (Asiri et al., 2016; Wei et al., 2016; Dahshan et al., 2017). However, there is a lack of evidence regarding collective effects of GC and LS in terms of predicting nurses' OC within the current nursing workforce. The purpose of this quantitative study was to explore the effects of GC and LS in terms of predicting staff

nurses' OC within the current nursing workforce. In this chapter, literature search strategies, theoretical foundations, and a review of existing literature are presented. The literature review includes the key variables of the study: OC, GC, and LS.

Literature Search Strategy

A comprehensive and thorough electronic literature search was undertaken using the following databases: EBSCOHost, Business Source Complete, PsychINFO, SAGE Journals, Education Resources Information Center (ERIC), Academic Search Complete, the Cumulative Index of Nursing and Allied Health Literature (CINAHL), OVID, and ScienceDirect. The following key terms were entered individually or combined: *OC*, *generation*, *generational cohort*, *Silent Generation*, *Veteran Generation*, *Baby Boomer*, *Generation X*, *Generation Y*, *Generation Y*, *Generation Z*, *New Generation*, *OC*, *transformational leadership theory*, *Strauss-Howe generational theory*, *leadership styles*, *nursing*, and *nursing practice.* An initial search for articles and national data published between 2015 and 2020 yielded no results for some keyword combinations, so the search was expanded to sources published between 1990 and 2020, as well as textbooks on nursing theory and research, the TLT, and GT. Articles were excluded if they were not in English, accessible online, a literature review, an instrument validation, or if the article did not address one of the key words. The initial number of articles returned was 10,697. After applying all exclusionary criteria, the final number of studies included in this literature review was 68.

Theoretical Foundation

There were two frameworks used for this study: the TLT and GT. Each theory is discussed as it relates to their origins, major theoretical concepts, and previous studies using the theory. The rationale for using the theory and applicability to the current study are also discussed.

Transformational Leadership Theory

Origins

The first framework for this study was the TLT which was developed through the works of Burns and Bass on leader-follower interactions. The TLT began with Burns' studies of political leaders in which he identified followers of supportive leaders achieved higher levels of motivaton. Burns (1978) identified that transforming leaders create change and transactional leaders use give and take negotiation tactics with staff to achieve organizational goals.. Bass (1985) expanded on Burns' work and identified leaders have the ability to motivate followers by using a combination of transformational and transactional leadership skills. Follower transformation occurs through a continuum of transactions in which the leader uses the following skills: inspirational motivation, idealized influence, intellectual stimulation, and individual consideration. Bass recognized transactional leaders maintain quality and performance and marginally impact improvements, whereas transformational leaders use vision and inner strength to move followers to a greater awareness.

Transformational leaders build on interactions to empower staff to a higher level of performance and effect change in the organization. Transformational leaders promote

attachments to organizations (Barbinta et al., 2017), create awareness by modeling behavior, create a vision to follow, and provide environments that support challenging the status quo (Bass, 1985; Bass, 1990).

Major Theoretical Concepts

Inspirational motivation occurs when the leader inspires, demonstrates confidence, provides a vision, is sincere, fosters alignment, and is committed to the organization's goals (Bass & Steidlmeier, 1999; Saleem & Naveed, 2017). Inspirational motivation is used by leaders to invoke team spirit through slogans and metaphors and motivate followers toward self-transformation (Bass, 1999; Bass et al., 2003; Bass & Steidlmeier, 1999). Idealized influence is practiced when the leader sets high expectations, builds trust, respect, admiration, and confidence with followers (Bass & Steidlmeier, 1999; Poghosyan & Bernhardt, 2018). The leader shares risks and is a role model for expected behaviors (Bass et al., 2003; Allen et al., 2016). Intellectual stimulation is fostered by encouraging followers to challenge the status quo, seek new solutions and innovations to address problems, and involving followers in the solution (Allen et al., 2016; Bass, 1985; Bass et al., 2003). The leader provides an environment in which the team is inspired, works together, and achieves team goals (Bass, 1999). Individual consideration is used by leaders to identify needs of followers and the information to mentor, coach, and encourage followers to grow (Allen et al., 2016; Bass et al., 2003; Groves, 2020). The leader provides opportunities for followers to meet their needs, foster growth, and nurture followers' self-transformation (Allen et al., 2016; Bass, 1999; Bass & Steidlmeier, 1999).

An underlying assumption of the TLT is that the leader has the ability to motivate, empower, and develop followers to move beyond their own self-interest and focus on needs and goals of the organization (Bass, 1999; Cote, 2017; Fischer, 2016; Siangchokyoo et al., 2020). The leader's use of the four concepts promotes followers' self-transformation to work towards the greater good of the organization. Each concept is said to be unique; however, if the leader were to use three or less of these concepts, the follower may not make the transformation.

Previous Studies

A review of the literature revealed no studies that involved the TLT as the framework to study the collective effects of GC and LS in terms of predicting staff nurses' OC within the current nursing workforce. Therefore, the review was expanded to identify studies in nursing and healthcare published prior to 2016 and include sources that used the TLT in a similar manner or with at least one of the variables (OC, GC, LS) of interest. None of the studies (Boamah et al., 2018; Harris & Mayo, 2018; Ho, 2016; Kim & Shin, 2019; Leach, 2005; Rittschof & Fortunato, 2016; Vaismoradi et al., 2016) used the TLT in a similar manner; however, there were studies that included at least one of the variables (Boamah et al., 2018; Ho, 2016; Leach, 2005).

TLT was used in five research studies involving nursing and other healthcare disciplines. Leach (2005) used the four concepts of TLT to guide the development of the research questions in studies attempting to identify the effect of transformational leadership behaviors on staff nurses' OC. Vaismoradi et al. (2016) used the four concepts to categorize themes associated with the development of a medication safety program for

nursing students. Rittschof and Fortunato (2016) used TLT as a lens to interpret their findings in a non-experimental study to determine if a relationship exists between transformational leadership and OC in child protective case workers. Boamah et al. (2018) used TLT as a basis for a theoretical model that assumes transformational leadership will create structural empowerment, which will increase job satisfaction and decrease adverse patient outcomes. And lastly, Harris and Mayo (2018) used a case study approach and TLT as a lens to interpret the findings when exploring whether nurse leaders should use charisma to inspire staff or their personal values to aid in developing relationships with staff.

Two studies were conducted in other industries. Ho (2016) used TLT to create predictor variables to link OC and follower's self-esteem among employees working in a variety of industries in China. Kim and Shin (2019) presented TLT as a two-dimensional model by combining the four key concepts into two dimensions (organization-related behaviors and person-related behaviors) and to study the effects of OC when mediated by psychological empowerment on organization-related behaviors and person-related behaviors for industry workers in South Korea.

While there is a vast amount of research (n = 469 studies) that involved using the TLT, there are limited studies in healthcare, and there are none that examined the three variables of interest in this study. More research is needed to lend credibility to the results and gain an understanding of the combined effects of GC and LS on nurses' OC.

Rationale

The TLT was selected as the framework for this study because it has been used in multiple disciplines, has key concepts that have been studied and validated, and provides a systematic approach to explore how nurses' OC might change based on GC and LS. TLT is a middle range theory which by definition is a discourse of "those between the minor hypotheses of day to day reserch and unitified theory" (Merton, 1968, p. 39), with straightforward ideas, and is more succinct than a grand theory, yet not as prescriptive as a practice theory (Jacox, 1974). TLT includes four key concepts (inspirational motivation, idealized influence, intellectual stimulation, and individual consideration) that are well defined. The definitions are consistent in the literature, providing the ability to promote the generalizability of the findings.

Smith and Johnson (2018) explained nurse leaders must have a framework to understand and address challenges in healthcare and suggest leaders use TLT to frame nursing professional development. Per Fawcett and Garity (2009), internal consistency is met if the concepts of the theory are clearly defined, if the same terms and definitions are used consistently for the concepts, and the propositions of the theory are reasonable. TLT has been refined over the years and a review of the literature for the past 15 years revealed consistent use of the concepts of inspirational motivation, idealized influence, intellectual stimulation, and individual consideration (Allen et al., 2016; Boamah et al., 2018; Mora & Tichalu, 2012).

Applicability to the Current Study

The TLT is applicable to the current study as it provides a framework to confirm or challenge the relationship between OC and LS. TLT focuses on actions leaders use to promote change that enhances staff performance and commitment to the team and organization. The MLQ 5x-Short, an instrument developed for use in TLT, was used in this study to measure the effects of LS. The results of this study helped to add to the theory by including nurses in the five generations, and the answers confirm the theory. Further, the theory provided a framework for data analysis and interpretation of the findings which enhance the ability to generalize the findings of the study.

Strauss-Howe Generational Theory

Origins

GT was developed by William Strauss and Neil Howe beginning in the 1980's (LifeCourse, 2020a). Strauss, an author and playwright, and Howe, a historian, identified a connection between history and generations; most specifically, there are four generational archetypes (prophet, nomad, hero, artist) that occur and repeat in a cycle of four turnings (Strauss & Howe, 1991). The four turnings comprise a saeculum, or full cycle, that lasts approximately 80 years (LifeCourse Associates, 2020b).

The turnings are cycles of history each generation enters enter every 20 years. The cycles include the high (first turning), the awakening (second turning), the unraveling (third turning), and the crisis (fourth turning). Each turning lasts approximately 20 years (LifeCourse Associates, 2020b). The evidence of the turnings was identified beginning with the Late Medieval Saeculum from 1435-1487 (only included the third and fourth

turnings), The Tudor Saeculum (1487-1594), New World Saeculum (1594-1704), Revolutionary Saeculum (1704-1794), Civil War Saeculum (1794-1865), and the Great Power Saeculum (1865-1946).

The current saeculum begins with the Boomer Generation. The first turning (1946-1974) includes the American High. The Consciousness Revolution occurred during the second turning (1964-1984), and the Long Boom and Culture Wars were present in the third turning (1984-2008). The fourth turning (2008-present) included the Global Financial Crisis (LifeCourse Associate, n. d.).

Strauss and Howe authored a number of books on generations (Strauss & Howe, 1991; Strauss et al., 1993; Strauss & Howe, 1997). Each book explains their theory, that generational cycles recur and provide evidence of the recurrence using historical events dating back to 1584. Strauss and Howe's work has provided a foundation for studies on generations.

Major Theoretical Concepts

There are four generational archetypes and four historical turnings that comprise GT. The generational archetypes are the prophet, nomad, hero, and artist; and the historical turnings are the high (first turning), awakening (second turning), unraveling (third turning); and crisis (fourth turning; Strauss & Howe, 1991). Each generational archetype spans about 20 years and the individuals have similar values, beliefs, communication style, culture, and attitudes (Howe & Strauss, 2007). Each archetype will experience each historical turning at either childhood, young adult, midlife, or elderhood (LifeCourse, 2020b). The Silent Generation has completed four turnings. They entered as

the artist generation during a crisis (fourth turning) that was evidenced by WWI and the Great Depression. As young adults, they entered the prophet generation the high (first turning) and experienced the Postwar Boom. During midlife they were the nomad generation and entered the awakening (second turning) and encountered the Consciousness Revolution. The Silent Generation ended the cycle in elderhood as the hero generation and experienced the Regan Revolution during unraveling (third turning). The following are definitions for saeculum, the archetypes, and historical turnings.

- Saeculum: Saeculum is an era or cycle of the human life that is said to be approximately 80 years and includes the four archetypes and four turnings (Preston, 2010).
- Archetypes: Archetypes are theorized pattern of how generations follow one another through time. Each generation (prophet, nomad, hero, and artist) remains the same, yet changes with age (remain the same, yet change as they age. (LifeCourse, 2020d).
- Turnings: Turnings are a four-stage cycle that spans 80 years. Each turning (high, awakening, unraveling, and crisis) lasts approximately 20 years (LifeCourse, 2020c).
- Prophet Generation – Individuals born into the prophet generation "are indulged post-crisis children, come of age as the narcissistic young crusaders of an awakening, cultivate principles as moralistic midlifers, and emerge as wise elders guiding the next crisis" (Howe & Strauss, 2007, p 84). The Boomer Generation entered the cycle as the Prophet Generation.

- Nomad Generation – Individuals born into the nomad generation (Generation X) “grow up as underprotected children during an awakening, come of age as the alienated young adults of a post-Awakening world, mellow into pragmatic midlife leaders during a Crisis, and age into a tough post-crisis elders” (Howe & Strauss, 2007, p. 84). Generation X entered the cycle as the Nomad Generation.
- Hero generation: Individuals born into the hero generation “grow up as increasingly protected post-Awakening children, come of age as the heroic young teamworkers of a crisis, demonstrate hubris as energetic midlifers, and emerge as powerful elders attached by the next Awakening” (Howe & Strauss, 2007, p. 84). Generation Ys entered the cycle as the Hero Generation.
- Artist generation: Individuals born into the Artist generation “grow up as overprotected children during a crisis, come of age as the sensitive young adults of a post-crisis world, break free as indecisive midlife leaders during an Awakening and age into empathic post-Awakening elders” (Howe & Strauss, 2007, p. 84). The Silent Generation and Generation Z entered the cycle as the Artist Generation.
- High (First Turning): The high occurs after a crisis, is considered a transition period that focuses on restoring order, bringing forward a renaissance, and a sense of achievement for making it through the crisis (Howe & Strauss, 1997).

- Awakening (Second Turning): The awakening occurs after the high, it is a shift from focusing on society to self-awareness, and the social order begins to deteriorate (Howe & Strauss, 1997).
- Unraveling (Third Turning): The unraveling is marked by individuals' personal satisfaction, lack of trust in the government, there is a lack of community, and community issues are not addressed (Howe & Strauss, 1977).
- Crisis (Fourth Turning): The crisis occurs because the community has been ignored, social order is destroyed, the government governs the people, there is a focus on family and good behaviors, and a move towards a new social order (Howe & Strauss, 1977).

Previous Studies Involving Generational Theory

A review of the literature revealed limited studies that included GT as the framework to study the collective effects of GC and LS in predicting staff nurses' OC. Therefore, the review was expanded to identify studies in nursing and healthcare and to include studies that used GT in a similar manner to this study and or with a least one of the variables. None of the studies used GT in a similar manner, however there were studies that included at least one of the variables.

Murray and Chua (2014) used GT to study the differences in LSs and motivators by gender. Murray and Chua proposed that the motivation to lead differs by gender; this difference may influence a leader to a specific LS. Stevanin et al. (2020) used GT as a framework to study workplace dimensions and managers' LSs for Boomer, Generation

X, and Generation Y nurses working in Italy (N=914) and Finland (N=152). Results revealed the Boomer Generation were more satisfied, when compared to Generation Y, for professional development leadership practices for both countries, and more so for Finnish nurses. Woodward et al. (2015) conducted a systematic review of the research of generational diversity that included 50 studies; 46 were quantitative, two were qualitative, and two used mixed methods. The sample included studies in the United States, Australia, Canada, New Zealand, Europe, and Asian countries. The results revealed differences by generational membership for leadership preferences and evidence to support the need to include the management of work, by generations, in generational theory.

There are limited studies using GT as a framework in healthcare. No current studies were identified that examined the three variables of interest in this study (OC [DV]; GC [IV]; and LS [IV]) in the same manner as this study. More research is needed to lend credibility to the results and gain an understanding of the combined effects of GC and LS on nurses' OC.

Rationale

The GT was selected as a framework for this study because it provides an outline to help understand the uniqueness of each GC as I seek to determine the combined effects of GC and LS on staff nurses' OC. The GT is a predictive model that explains how each generation will change and transform a community, state, and nation and has been used since 1991 to explain generational differences (LifeCourse Associates, 2020b). The

archetypes and turnings have been used consistently in the literature since the initial publication of the GT by Strauss and Howe (1991).

Applicability to the Current Study

The GT is applicable to the current study as it provides a framework to confirm or challenge the relationship between OC and GCs. The results of the study will help to add to the theory by including nurses, which in turn may confirm or change the theory. Further, the theory provided a framework for data analysis and interpretation of the findings which enhanced the ability to generalize the findings of the study.

Literature Review

Organizational Commitment

OC has been studied since the late 70s to determine why employees leave organizations (Lee & Mowday, 1987; Meyer & Allen, 1991). Early work focused on commitment as an attitude versus behavior (Lee & Mowday, 1987) and has been defined as "a psychological state that (a) characterizes the employee's relationship with the organization, and (b) has implications for the decision to continue or discontinue membership in the organization" (Meyer & Allen, 1991, p. 67). According to Meyer and Allen (1991), OC has three components – affective, continuance, and normative commitment. Each component is single and distinct; however, an employee may use multiple components at once (Meyer & Allen, 1991).

AC represents the employee's attachment to the organization because they want to be there (Allen & Meyer, 1990; Lee et al, 2001; Meyer et al., 1990). An employee with AC may feel the organization meets their needs and expectations (Meyer et al., 1990).

CC is based on the employee's need to be with the organization (Lee et al., 2001; Meyer et al., 1990). The employee makes the decision based on the cost (salary and benefits) of staying versus leaving the organization (Allen & Meyer, 1990; Meyer & Allen, 1991; Meyer et al., 1993). NC occurs when an employee feels they have an obligation to stay with the organization (Allen & Meyer, 1990; Levine et al., 2019; Meyer & Allen, 1991; Meyer et al., 1993). This may be evident in employees who have gained relationships with others or received benefits for which they feel the need to repay (Lee et al., 2001; Meyer et al., 1993). It is important to understand each component of OC as there are items for each on the electronic survey and the results from the survey are included in the data analysis.

Factors Influencing Organizational Commitment

Generational Cohort. Studies examining factors that influence OC among specific GCs have been conducted with populations of general private sector workers; tech workers; banking, retail, hotel, and restaurant employees; and, with workers in the U. S., Australia, Brazil, China, India, and in Muslim countries (Agrawal, 2017 ; Benson et al., 2018; Carver & Candela, 2008; Carver et al., 2011; Cheah et al., 2016; Choi et al., 2020; Christopher et al., 2018; da Silva et al., 2015; Deng, 2018; Ennis et al., 2018; Glazer et al., 2019; Ilhan et al., 2019; Kim et al., 2018; Mohsen, 2016; Naim & Lenka, 2017; Nurenda & Asmoko, 2020; Prathiba & Balakrishnan, 2017; Sari, 2018; Stewart et al., 2017; Volkova et al., 2019; Walden et al., 2017; Yang & Wei, 2019). What follows is a synthesis of the findings organized by GC.

The Boomer Generation appreciate values and culture of their organizations more than other generations (da Silva et al., 2015; Stewart et al., 2017), and the Boomer Generation who express attachment to their organizations have greater OC and retention rates (Christopher et al., 2018). With only three extant studies published within the past 5 years, a lack of understanding regarding the factors influencing OC among the Boomer Generation remains.

Like the Boomer Generation, members of Generation X who value the organization's culture (Stewart et al., 2017), and who have higher levels of attachment to the organization, tend to have higher levels of OC. OC in Generation X is also influenced by a variety of other factors (Christopher et al., 2018). Volkova et al. (2019) found Generation X employees perceived a lower level of organizational identification when compared to the Boomer Generation and Generation Y. Agrawal (2017) found that OC among Generation X is influenced by personality traits such as warmth, reasoning, emotional stability, dominance, liveliness, rule boundness, abstractedness, and self-reliance. Other studies found that the attributes of the work environment such as work-life balance (Mohsen, 2016), opportunities available for training and development, compensation and incentives (Cheah et al., 2016), organizational justice (Chen et al., 2015) and extrinsic-future oriented work values (Ilhan et al, 2019) were the most influential at ensuring OC among members of Generation X.

More recent studies have focused on understanding OC among Generation Y. Generation Ys resemble the Boomer Generation and Generation X in that some studies have linked factors such as organizational culture (Agrawal, 2017), attachment to the

organization (Christopher et al., 2018) professional commitment (Singh & Gupta, 2015), work-life balance (Mohsen, 2016; Nurenda & Asmoko, 2020), and opportunities for development (Naim & Lenka, 2017) to their OC.

However, some of the findings have not been demonstrated consistently across studies, for example Stewart et al. (2017) found no relationship between organizational culture and OC among Generation Ys, and Choi et al. (2020) found Generation Ys working in social enterprises have less OC when compared to previous generations. Other research indicated that Generation Ys are more committed to organizations when they feel valued (Putri et al., 2018); are rewarded (Stewart et al., 2017); have intrinsic-present oriented work values (Ilhan et al., 2019); are happy, entertained, and working in teams (Civelek et al., 2017); and have job satisfaction (Sari, 2018). Those findings are echoed in recent studies both in the U.S. and overseas, which found that job satisfaction among Generation Y employees is closely linked to AC (Kim et al., 2018) and that job engagement among Generation Ys is essential to gain their OC (Prathiba & Balakrishnan, 2017; Walden et al., 2017). Taken together, the findings of these studies indicate that Generation Ys differ from other GCs. Generation Y's personal satisfaction seems to drive their OC either directly or indirectly to a greater extent.

Research involving members of Generation Z (a.k.a. New Generation) is in its infancy because in 2020 much of this cohort is just beginning to enter the workforce. Current research indicates that Generation Z employees, like those of Generation X, value having opportunities for professional development available to them (Deng, 2018). Another study found that all three components of OC (affective, normative, and

continuous) among Generation Z employees help support the role of inclusive leadership in affecting employee behaviors (Yang & Wei, 2019); the same research found that increases in affective and continuous commitment were associated with increases with the employee's perception that organization members use justice in organizational relationships. Thus, unlike other GCs, the preliminary evidence indicates that for Generation Z, LS and the ethics of the organization in which they are employed influence OC. Nonetheless, the nature and extent of that influence is not fully understood.

In summary, all of the studies conducted that addressed GCs were quantitative in nature and used a questionnaire to survey participants, the same as this study. However, none of the studies included the five generations in the current nursing workforce, there was inconsistent use of reliable and valid measurement tools, inconsistent use of theoretical frameworks, and large variations in sample sizes across studies. The current results indicate that generational differences in OC do occur at the global level but there was a substantial amount of variation in the findings. Due to geographic and socio-cultural variations in the populations studied, the study designs employed, and the variables measured, direct comparisons between studies are difficult. Further, none of the studies were conducted in a healthcare setting. More research is needed to understand the relationship between GC and OC, especially in healthcare settings.

Leadership Styles. LSs have been studied as they relate to OC. What follows is an overview of research on LSs as defined in this study.

Myesigwa et al. (2020) suggested leaders who vary their LS can promote job satisfaction and OC. Findings specific to transformational leadership identified

transformational leaders promote high OC and productivity (Surucu et al., 2020). Similarly, OC was positively associated with transformational leadership (Jain & Duggal, 2016; Majid & Cohen, 2015) and remains positive when mediated by self-determination (Bashir et al., 2019) and a shared vision (Chai et al., 2017), strengthened by job autonomy (Jain & Duggal, 2018), predicted by organizational climate (Makhathini & Van Dyk, 2018), and facilitated by means of perceived work impact (Peng et al., 2020). Likewise, transactional leadership has been positively correlated with OC (Makhathini & Van Dyk, 2018; Sayadi, 2016); and is positive when mediated by competence in one's role for healthcare workers, and competence and relatedness (being connected to others) for workers in industry (Afshari & Gibson, 2016). The studies revealed a positive relationship between OC and transformational and transactional leadership. However, there are variations when the studies include multiple LSs.

Similar, yet different findings were noted with Nigerian civil service employees. Abasilim et al. (2019) identified a positive relationship between OC and transformational (to a greater extent) and laissez-faire LS; however, there was a negative relationship with transactional leadership. OC was negatively correlated with passive-avoidant leadership for nurses working in Saudi Arabia (Al-Yami et al., 2018). The findings varied with AC. AC was positively correlated to a greater degree with transformational leadership compared to transactional leadership (Choi et al, 2020). Similar findings were noted with South African soldiers who were reported to have greater AC with transformational leadership compared to transactional and laissez-faire LS, and positive NC for transformational and transactional leadership, when mediated by organizational climate

(Makhathini & Van Dyk, 2018). The findings were inconsistent and may be due to socio-cultural variations and the population.

In summary, all studies related to LSs were quantitative in nature, used questionnaires with measurement scales that have been tested for reliability and validity, and used a cross-sectional design. All but one study (Peng et al., 2020) was conducted outside the U.S. and studies included participants from the military (Makhathini & Van Dyk, 2018), retail (Long et al., 2016), education (Sayadi, 2016), civil service (Abasilim et al., 2019), healthcare (Afshari & Gibson, 2016; Al-Yami et al., 2018), manufacturing (Afshari & Gibson, 2016), food (Chai et al., 2017), non-profit (Peng et al., 2020) and banking (Bashir et al, 2019). The sample sizes varied, and there was inconsistent use of a theoretical framework. The current results indicate differences in LSs and OC do occur at the global and organizational level, but there is a variation in the findings. Due to geographic and socio-cultural variations in the populations, the study designs employed, and the variables measured, direct comparisons between studies are difficult. More research is needed to understand the relationship between LS and OC in healthcare settings in the U.S.

Organizational Commitment and Nursing

During the review of the literature, several factors were identified that influenced nurses' OC. The factors may be classified into six categories: work engagement, empowerment, social responsibility, professional growth, autonomy, and job satisfaction. The factors are important to include as each are outcomes one expects when a leader uses the four key concepts (inspirational motivation, intellectual stimulation, individual

consideration, and idealized behaviors) associated with TLT. What follows is a synthesis of the findings organized by factors.

Work Engagement and Empowerment

The most recent studies on work engagement have focused on AC. Gupta et al. (2016) identified AC mediates work engagement for nurses in India. Similarly, relational job characteristics (contact with clients and impact on client's lives) were found to contribute to Portuguese nurses' work engagement which positively impacted the nurses' AC (Santos et al., 2016). Empowerment was found to positively correlate with Iranian nurses affective, normative, and continuance commitment (Gholami et al., 2019). The studies revealed a correlation between work engagement and AC as well as empowerment and the three components of OC for nurses working outside of the U.S., however there is a lack of understanding of the impact on nurses in the U.S.

Social Responsibility

Social responsibility has been studied as it relates to nurses' duty and climate of the organization. Southern Taiwanese senior nurses were found to have high social responsibility and strong NC when compared to junior nurses who have high ethical responsibilities and strong CC (Hsieh et al., 2019). And, at the organizational level, NC was influenced by a rules-based climate for nurses working in Bosnia and Herzegovina (Dinc &Huric, 2017). The studies revealed social responsibility, at the personal and organizational level, affect OC, however the studies were limited to nurses outside the U.S. leading to a lack of understanding of the impact on U.S. nurses.

Turnover and Retention

Turnover and retention have been key variables in studies associated with OC. Yurumezoglu et al's. (2019) study of nurses working in Turkey revealed nurses affective and NC affect turnover, however Im et al. (2016) identified Korean nurses, in formal huddling (empowerment and social networking) programs, had higher perceived NC compared to those not in a program and posited the program may impact retention. The findings are varied and are limited to nurses outside the U.S.

Professional Growth, Autonomy, and Job Satisfaction

Opportunities for professional growth (Im et al., 2016), involvement in decision making (Clark & Kenski, 2017) and autonomy (Labrague et al., 2019), are predictors of nurses' OC. Job satisfaction was found to influence normative (Dinc & Huric, 2017) and OC (Labrague et al., 2019; Lin & Chang, 2015). OC is a mediating factor between self-concept and burnout for Chinese nurses (Cao et al., 2015) and the Taiwanese nurses' trust in the organization was found to have a positive effect on OC (Chen et al., 2015). The findings of the studies are consistent in that the professional growth, autonomy, job satisfaction, and trust have a positive effect on OC for nurses working outside the U.S.

In summary, all but one study (Clark & Kenski, 2017) was quantitative in nature, all were conducted outside the U. S., and all but one (Im et al., 2016) used a cross-sectional design. Questionnaires were used for the quantitative studies and included the use of measurement scales that have been tested for reliability and validity. The current research indicates there are a variety of factors that impact nurses' OC. Although the factors are varied, all relate to the culture and environment in which the nurse is working.

Overall, nurses who are engaged, feel empowered, have a sense of social responsibility, are provided opportunities for professional growth, are involved in problem solving, and satisfied in their jobs tend to have higher levels of OC. Work engagement (Gupta et al.,2016; Santos et al., 2016) studies tended to focus on AC; whereas NC was studied for retention (Im et al., 2016); CC for social responsibility (Hsieh et al., 2019); and empowerment included the three components of OC (Gholami et al., 2019). The studies revealed OC is a global concern in nursing, however little is known of the impact for nurses in the U.S. More research is needed to understand the relationship between OC and nurses for nurses practicing in the U.S.

Generational Cohorts and Nursing

Studies of GC and nursing have examined the relationship of GC, job satisfaction, retention, and OC among nurses. What follows is a synthesis of the findings by job satisfaction and retention.

Job satisfaction

Two studies in the U S. revealed Generation Y nurses are more satisfied in their job if they have good relationships with co-workers, feel they are making a difference, are provided an opportunity to grow (Anselmo-Witzel et al., 2017), and have supportive leaders (O'Hara et al., 2019). The results suggested Generation Ys are more satisfied in their positions with a positive work environment and the ability to grow professionally.

Retention

The literature reveals retention differs by GCs. This is evidenced by the number of years nurses stay in a position. Dols et al. (2019) identified the average number of

years a nurse remains in a position is highest with the Boomer Generation (8.25 years), followed by Generation X (5.83 years), and is lowest with Generation Ys (3.03 years). Engagement and retention were addressed by Hisel (2020) who identified veteran nurses were move engaged, followed by the Boomer Generation, Generation X, then Generation Ys. Nurses' attachment to the organization is another factor to consider and results revealed Generation Ys intention to stay is stronger when compared to the Boomer Generation and Generation X (Shacklock & Brunetto, 2011). However, the findings are not consistent in results that revealed Generation Y nurses are less willing to give of themselves and have lesser work attachment when compared to Generation X and the Boomer Generation (Huber & Schubert, 2019). Interventions by the leader have been found to promote retention as identified in a study by Koppel et al. (2017) in which Generation Y nurses were found to remain with an organization if the leader promotes loyalty and engagement. Although little is known about retention rates among Generation Z nurses, Hampton and Welsh (2019) found that they are more likely to stay with a job if they have job security, find the job interesting and challenging, and are provided flexible benefits that include continuing education. The five generations of this proposed study were represented in the studies presented which revealed variation by GC.

In summary, the studies provided a broad overview of the research being conducted in nursing on the five GCs in the current workforce. The majority of the studies were quantitative in nature, there was one qualitative, and one mixed method. The sample sizes varied and there were a variety of research designs and all but one (Shacklock & Brunetto, 2011) of the quantitative/mixed method studies used a

questionnaire to obtain primary data. Results revealed Generation Ys are satisfied when the leader provides a positive work environment and the effects on retention are varied by generation; however, little is known of the impact for nurses. More research is needed to understand the relationship between OC and nurses practicing in the U.S.

Generational Cohort, Organizational Commitment, and Nursing

There are a limited number of recent studies that included GC, OC, and nurses. Christopher et al. (2018) revealed a positive relationship between Generation X nurses', working in Australia, job satisfaction and affective, continuance, and normative commitment. Keepnews et al. (2010) studied new U.S. RNs and found that Generation Y nurses reported greater OC when compared to Generation X and the Boomer Generation. Jones (2015) study of nurses working in Alabama revealed nurses' OC did not differ by generation (Silent Generation, the Boomer Generation, Generation X, and Generation Y), however RNs had greater AC when compared with LPNs.

Recent studies have been conducted in other disciplines. Generation Y rate lower levels of CC when compared to Generation X (Glazer et al., 2019). A study of timeshare employees' intent to stay and OC revealed Generation Y have higher affective and CC compared to Generation X and the Boomer Generation; and Generation X's intent to stay was influenced by NC, however there was no effect for the Boomer Generation and Generation Y (Mohsen, 2016). Jenna (2016) study of industry employees in India revealed Generation X has higher CC, Generation Y have higher NC, and there is no difference for AC.

Results are varied. Strengths of the studies included large sample sizes and the use of valid and reliable measurement tools. Due to the limited number of studies, the difference in populations (new RNs, nurses currently working, industry and timeshare employees), and the lack of information on the Generation Z, no generalizations may be made from the studies. More research is needed to understand the relationship of GC to OC among nurses.

Organizational Commitment, Leadership Style, and Nursing

Four studies (Asiri et al., 2016; Dahshan et al., 2017; Rofiqi et al., 2019; Vagharseyyedin, 2016) examined the effects of OC and LS in nursing. Rofiqi et al. (2019) conducted a systematic review to determine the factors affecting nurses' OC using original articles published between 1999 and 2017 using the keywords organization commitment, nursing, health, and the factors of commitment. The return was 2,134 articles; 15 articles met the inclusion criteria of OC and nursing as well as a cross-sectional design. The results revealed LS is a factor in nurses' OC. Vagharseyyedin (2016) conducted an integrative review of 33 studies published between 2000 and 2013. The results revealed that nurses' OC was positively impacted by nurse executives' use of transformational and transactional leadership as well as nurse managers' use of transformational leadership. Findings were similar in the cross-sectional study of 332 Saudi Arabian nurses that revealed LS, combined with empowerment, was found to promote nurses' OC (Asiri et al., 2016). Dahshan et al. (2017) found similar results in a cross-sectional study of 570 Saudi Arabian government hospital nurses. Results revealed

there was a positive correlation between transformational and transactional style and OC; the correlation was higher for transformational leadership.

The extant literature involving both OC and LS among nurses included one systematic review (Rofiqi, (2019), an integrative review (Vagharseyyedin, 2016), and two quantitative studies that used cross-sectional design to study nurses working outside the United States (Asiri et all, 2016; Dahshan et al., 2017). The sample sizes for the quantitative studies were large and represented nurses working in the acute care setting. The systematic review and the integrative review provided information to support LS is a factor in nurses' OC and the studies provided a global perspective that LS does affect OC in nurses' working outside the U.S. What is missing is how LS impacts OC among U.S. nurses. More research is needed to gain an understanding of the effects of LS on OC for nurses working in the U.S.

Summary and Conclusions

There are no studies on the combined effects of GC and LS on nurses' OC. There are studies that include nurses and at least two of the variables. Studies on OC and nursing reveal that work engagement (Gupta et al., 2016; Santos et al., 2016), empowerment (Gholami et al., 2019), social responsibility (Hsieh et al., 2019), turnover (Yurumezoglu et al., 2019), retention (Im et al, 2016), professional growth (Im et al, 2016;), autonomy (Labrague et al., 2019; Lin & Chang, 2015; Miedaner et al., 2018), and job satisfaction (Dinc & Huric, 2017; Salem et al., 2017) are factors impacting nurses' OC. Studies of GCs in nursing include job satisfaction and nursing retention and provide the ability to identify themes that included the five generations. The findings of some

studies indicate that Generation Y are satisfied with their roles within positive work environments (Anselmo-Witzel et al., 2017; O'Hara et al., 2019), however, retention varies by generation (Dols et al., 2019; Hampton & Welsh, 2019; Hisel, 2020; Huber & Schubert, 2019; Koppel et al., 2017).

Studies on GC, OC, and nurses primarily included the Boomer Generation, Generation X, and Generation Y; older studies (before 2015) include the Silent Generation; and there are no studies for Generation Z. Common themes for OC and LS include leaders who use transformational (Jain & Duggal, 2016; Majid & Cohen, 2015) and transactional (Makhathini & Van Dyk, 2018; Sayadi, 2016) LSs promote OC by emulating best practice, focusing on the needs of the follower, and promoting a positive work environment. Studies of OC, LSs, and nursing revealed LS is a factor in nurses' OC (Rofiqi et al., 2019); nurse leaders who use transformational and transactional LSs positively impact nurses' OC (Dahshan et al., 2017; Vagharseyyedin, 2016). LS, when combined with empowerment, promotes OC (Asiri et al., 2016).

Generational differences are evident in the literature in terms of LSs and OC; however, there are no studies that include Generation Z, which limits the ability to identify differences within current workforces. There exists a gap in the literature regarding collective effects of GC and LS in terms of predicting staff nurses' OC within the current nursing workforce.

Chapter 3: Research Method

Introduction

The purpose of this descriptive cross-sectional study was first to establish whether OC differs according to GC and LS individually, and then explore the combined effects of GC and LS on staff nurses' OC. Chapter 3 includes details regarding the research design and rationale, methodology, and procedures for recruitment, participation, and data collection. Instrumentation and operationalization of the MLQ 5x-Short, and TCM employee commitment survey as well as operationalization of variables and data analysis plan are explained. This is followed by threats to validity, ethical procedures, and a summary.

Research Design and Rationale

The DV in this study was OC, and the IVs were GC and LS. OC is continuous in nature and is measured using an interval scale. GC and LS are both categorical in nature and are measured using a nominal scale.

This study, which involved exploring the combined effects of GC and LS on staff nurses' OC, was quantitative in nature with a descriptive cross-sectional design. The quantitative approach was selected as the intent of the study was to explore the effects of GC and LS on staff nurses' OC. Exploring the effects of an independent variable on a dependent variable requires numeric measures to answer the RQs (Gray et al., 2017). A non-experimental cross-sectional design was selected. Cross-sectional designs do not include control groups and all the data are captured at one point in time (Creswell & Creswell, 2018).

The quantitative approach has constraints. The first constraint is the study was time because data collection was conducted until the minimum sample size was reached. For this study, measurement tools (i.e. MLQ and TCM) that have been tested and found to be reliable and valid were used. Access to the MLQ 5x-Short manual and survey questions required money, and there were fees to gain access to deliver the survey via SurveyMonkey. The quantitative design was an appropriate framework to answer the RQs, and numeric results provided data needed to advance knowledge associated with staff nurses' OC.

Methodology

Population

The target population was RNs, LPNs, and LVNs providing direct patient care in the acute care setting in two Northeastern U.S. hospitals, nurses who were members of professional nursing organizations in the Northeastern U.S., nurses licensed to practice in the state of Florida, and nurses recruited nationwide through LinkedIn and via snowball sampling. The size of the target population was 32,000 nurses, and the minimum sample size was 200 which was changed to 159 after conducting the post-hoc analysis. Acute care settings include critical care, emergency department, labor and delivery, medical/surgical, mental health, pediatrics, surgical services, and urgent care departments. A screening question was used to determine if participant volunteers worked in acute care settings.

Sampling and Sampling Procedures

Sampling Strategy

The sampling strategy involved convenience and snowball sampling. Convenience sampling is a type of nonprobability sampling that involves drawing from available populations to target all members of the population to reach the needed sample size; however, its use has the potential to introduce bias and sampling errors (Gray et al., 2017). Participating hospitals in the Northeastern U.S., professional nursing organizations in the Northeastern U.S., LinkedIn, and nurses in the Florida Health Portal were readily available to me. Snowball sampling, a method used to reach out to potential participants by means of individuals with similar characteristics (Gray et al., 2017), was used to promote generalizability and increase the needed sample size. To meet the sample size, reminder emails (see Appendix E) were sent to hospital participants, recruitment letters were posted four times on LinkedIn, and recruitment invitations were sent to Florida Health Portal participants until the needed sample size was met.

To reduce selection bias, potential participants completed screening questions to ensure they met the inclusion criteria (Gray et al., 2017). The inclusion criteria included age 18 year or older and born between 1928 and 2012; current license to practice as an RN, LPN, or LVN; and work at least 50% of the time providing direct patient care in the acute care setting as a staff nurse.

Procedures to Draw the Sample

The potential sample for this study was identified from currently employed RNs, LPNs, and LVNs at two participating hospitals in the Northeastern U.S., members of professional nursing organizations in the Northeastern U.S., nurses on LinkedIn, and nurses listed in the Florida Health Portal who were practicing in an acute care setting.

Snowball sampling was used by encouraging volunteers to share the recruitment letter with other nurses from anywhere in the U.S.

Nurses working at the participating hospitals in the Northeastern U.S. received the hospital recruitment letter (see Appendix D) and reminder emails (see Appendix E) from a site representative at each participating hospital. The revised recruitment letter (see Appendix F) was posted on LinkedIn and emailed by the president of each professional nursing organization, located in Northeastern U.S. The Florida Health Portal recruitment letter (see Appendix G) was emailed to nurses in the Florida Health Portal.

The recruitment letters included inclusion criteria to screen potential participants (see Appendix A). Volunteers accessed the informed consent form through a link in the recruitment letter. Once volunteers agreed to participate, screening questions appeared. Any responses that affirmed an exclusion criterion was met ended the survey.

Sampling Frame

The sampling frame included adults who were 18 years and older and nurses in non-administrative positions that dedicate at least 50% of their workday to providing clinical services to patients and their families who were part of one of five GCs (Silent Generation, Boomer Generation, Generation X, Generation Y, Generation Z) and work in critical care, emergency departments, labor and delivery, medical/surgical, mental health, pediatrics, surgical services, or urgent care. Administrative positions included the level of supervisor and higher. All nurses were excluded who served in roles with formal titles as supervisor, manager, director, or member of the C-suite (i.e., Chief Nursing Officer,

Chief Executive Officer, Chief Financial Officer, Chief Operating Officer, or Chief Information Officer).

Power Analysis and Sample Size

G*Power version 3.1.9.7 (Heinrich Heine Universitat Dusseldorf, 2020) was used to conduct the power analysis to determine sample size. The power analysis included statistical power, alpha, and effect sizes. An 80% statistical power was selected as this indicates that there is at least an 80% chance of finding a statistically significant finding if one exists (Gray et al., 2017). The alpha is the probability of making a Type I error and has been set at 5% (0.05), a generally acceptable level (Gray et al., 2017), and is calculated based on a 95% confidence level (Werner, 2013).

Effect size provides the ability to measure the relative strength of differences between two populations (Gray et al., 2017). Effect size is measured as small (0.0 to 0.2 or -0.2 to 0.0), medium (0.3 to 0.7 or -0.3 to -0.7), and large (0.8 to 1.0 or -0.8 to -1.0) (Meyvis & Van Osselaer, 2018). The assumption at the start of the calculation was to use a medium effect as it is a generally accepted practice (Cohen, 1992). The effect sizes are calculated based on the statistical tools being used to analyze the data (Gray et al., 2017).

An ANOVA with fixed effects, omnibus, one-way (power = 0.8, medium effect, one-tailed, and alpha = 0.05) was used to answer RQ 1 & 2. The minimum sample size was 159. A GLM (main effects) was used to analyze RQ 3; the minimum sample size for the analysis (power = 0.8, medium effect, and alpha = 0.05) was 17. Based on these calculations, the minimum sample size was 159. The available population was 93,140. In anticipation of a rate 15 to 20% missing data (Enders, 2003, as cited in Dong & Peng,

2013). The data was cleaned every one to two weeks using the survey tool criteria to determine if data should be included in the analysis. After the completion of the study, a hospital level report of the results will be provided to the participating hospitals.

Procedures for Recruitment, Participation, and Data Collection

Recruitment procedures

Following Walden University IRB approval (approval number is 01-04-21-0812559; expires on January 3, 2022), the recruitment flyer (see Appendix C) was used to announce the survey in the hospitals. Due to COVID-19 restrictions, the hospital site representatives took responsibility to post the flyer on the nursing units and in common areas of the hospital one week prior to sending the hospital recruitment letter (see Appendix D). The flyer included information about the study and my contact information. The recruitment letter was emailed to the site representatives at each hospital who in turn emailed the recruitment letter to all nurses who worked at the hospital. The recruitment letter explained the study and requested the nurses to participate. The letter also included a statement asking potential participants to forward the recruitment letter to fellow nurse colleagues. Reminder emails (see Appendix E) were sent by the site representatives two and four weeks after the distribution of the recruitment letter.

The recruitment letter was emailed to the presidents of the four nursing organizations who in turn emailed the letter, one time, to their members. I posted the recruitment letter LinkedIn four times, and the recruitment letter was emailed from my Walden University email to 30,704 nurses included in the Florida Health Portal.

Each recruitment letter included a link to the consent form. Each data collection group had a unique link to allow for data collection method level reporting of the data after completion of the study. Two reminder emails were sent to each site representative to email at 2 and 4 weeks after the initial distribution of the recruitment letter. The reminder email included the statement "if you have already completed the survey, thank you, if you have not, please complete the survey as noted in the email sent on (date included). To foster snowball sampling, the recruitment letter included language encouraging the participants to share the recruitment letter with nurses outside their organization.

A disclosure statement was included in the recruitment letters that informed participants that they may refuse to answer any or all the questions and may exit the survey at any time without penalty. Once the participant clicked on "I consent", the screening questions appeared. Any responses that affirmed an exclusion criterion was met ended the survey.

Informed Consent

The link to the informed consent form was included in the recruitment letter. Potential participants were instructed to review the informed consent and click on "I consent" if they selected to participate in the survey. Participants who selected "I consent" were presented with screening questions that included the inclusion and exclusion criteria to determine eligibility to participate in the survey. Any responses that affirmed an exclusion criterion was met ended the survey.

Data Collection, Exit from Study, & Follow-up

Following informed consent and meeting the screening criteria, the demographic question and survey questions were made available using an electronic survey delivered through SurveyMonkey. Reminder emails were sent to the hospital nurses at 2 and 4 weeks after receiving the initial recruitment letter. The reminder email included the statement "if you have already completed the survey, thank you, if you have not, please complete the survey as noted in the email sent on (date)". The recruitment letter was posted on LinkedIn initially, at one and two weeks, and again at the third week in an attempt to reach the sample size.

Participants were able to exit the study by means of not completing the survey. Participants also had the ability to skip questions and exit the survey without penalty.

Instrumentation and Operationalization of Constructs

Once opened, the survey included one demographic question that was used to describe the sample and the two instruments. The first instrument was the 45-item MLQ 5x-Short rater form and the second was the 18-item revised TCM employee commitment survey.

MLQ™ 5x-Short Rater Form

Basis for Development. The MLQ (Form 1) was first introduced by Bernard Bass in 1985 and included six factors (charisma, intellectual stimulation, individualized consideration, contingent reward, management-by-exception, and laissez-faire (Bycio et al., 1995). Based on analysis and critiques the survey was revised, which has led to the current version, MLQ 5x, published in 1993 and revised in 1999. The revised survey is

based on the conceptual model of full range leadership (Avolio & Bass, 1991). There are two versions, MLQ 5x-Short and MLQ 5x-Long. The short version is intended for survey and research purposes whereas the long version, which is no longer in print, is intended for training, development, and feedback (Avolio & Bass, 2004). The MLQ 5x-Short has 45 items: 36 leadership and nine outcomes items presented by three LSs (transformational, transactional, passive-avoidant), nine components (idealized attributes, idealized behaviors, inspirational motivation, intellectual stimulation, individual consideration, contingent reward, management-by-exception: active; management-by-exception: passive; laissez-faire) and three outcomes (extra effort, effectiveness, satisfaction with the leadership (Avolio & Bass, 2004). The MLQ 5x-Short was created in English, translated into multiple languages (German, German, Italian, Portuguese, Spanish, Swedish, Turkish), and has been used in multiple countries (e.g., China, Germany, Great Britain, India, Japan, South Africa, United States; Avolio & Bass, 2004).

The MLQ 5x-Short rater form is used to measure a specific leader's qualities by having the leader complete the Leader Form and subordinates complete the rater form (Avolio & Bass, 2004). For the purposes of this study, only the MLQ 5x-Short rater rorm, as published in the Multifactor Leadership Questionnaire™, Third Edition, Manual and Sample Set (Avolio & Bass, 2004), was used as the intent of the study was to identify the effect LSs have on staff nurses' OC. The MLQ 5x-Short includes 45 items and the range of scores is 0 to 180. The rating scale uses a 5-point Likert Scale (0-4): 0= Not at all; 1 = Once in a while; 2 = Sometimes; 3 = Fairly often; and 4 = Frequently, if not always.

Appropriateness for the Study. The MLQ 5x-Short was appropriate for this study because the tool includes the concepts and questions to provide data to quantify to what extent LS (transformational, transactional, and laissez-faire) affects staff nurses' OC as identified in RQ2: Is there a difference in staff nurses' OC by LS?, and RQ3: To what extent does GC and LS predict staff nurses' OC?. The tool has good psychometric properties (Avolio & Bass, 2004, Boamah & Tremblay, 2019; Dimitrov & Darova, 2016), and has been used in recent studies (Alloubani et al., 2018; Flemming, 2017; Keller & Weibler, 2015; Khali, 2016; Kueenzi, 2019; Tyczkowski, 2015), providing the ability to compare the results which will strengthen external validity of the study.

Permission from the Developer. The MLQ 5x-Short is published by Mind Garden. The permission to use the instrument is attached in Appendix H.

Reliability and Validity. The MLQ 5x-Short has been tested for construct validity and reliability. Confirmatory analysis (CFA) and reliability testing were conducted on the nine-factor model of the MLQ5x-Short using 2004 normative samples (*N*=27,285). The confirmatory analysis results revealed goodness-of-fit index = 0.91; adjusted good-of-fit index = 0.89; comparative fit index = 0.91; and root mean square error of approximation (RMSEA) = 0.05 (Avolio & Bass, 2004). Comparable findings were identified by Boamah and Tremblay (2019) with data from the 2015 provincial registry database of practicing nurses (*N* = 1,000); the CFA results revealed goodness-of-fit index = 0.91; adjusted good-of-fit index = 0.90; comparative fit index = 0.91; and root mean square error of approximation = 0.05; and omega coefficients of .869 to .929. The internal consistency reliability results revealed a range from 0.67 to 0.88 (Avolio & Bass,

2004). The findings were found to be consistent with 2013 data from the National Defense Academy (N = 363) at the three-factor level (transformational, transactional, passive/avoidant) revealed the reliability scores of 0.735 to 0.866 (Dimitrov & Darova, 2016). Based on the results the MLQ 5x-Short has proven validity and good to high internal consistency.

Current Use. Most recently the MLQ 5x-Short has been used for studies in nursing (Alloubani et al., 2019; Tyczkowski, 2015), education (Khali, 2016), business (Flemming, 2017; Kueenzi, 2019) and industry (Keller & Weibler, 2015). The researchers addressed construct validity and reliability, results revealed an $\alpha = 0.848$ for the total MLQ™ (5x-Short; Tyczkowski, 2015); the use of multiple sites to strengthen validity, and the $\alpha = 0.91$. (Keller & Weibler. 2015); pilot testing and the use of expert opinion (Khali, 2016); intercorrelations that ranged from .010 to .841 and the $\alpha = .71$ (Flemming, 2017); construct validity ranges between 0.62 and 0.91 and reliability with $\alpha = 0.94$ (Alloubani et al., 2019); and the model identified management by exception-active (MBEA) and management by exception-passive (MBEP) consistently lacked validity and reliability, however there was a correlation between at least some of the involved indictors (Kueenzi, 2019).

Operational Definitions. For this study, LS is one of the IVs, is categorical in nature, and was measured using a nominal scale. The following is The MLQ 5x-Short operational definition and sample question for each LS.

Laissez-faire leadership style (LFL): Laissez-faire LS is the absence of a LS and is characterized as avoiding responsibility (Bass, 1999). A sample item is "talks optimistically about the future" (Avolio & Bass, 2004, p. 116).

Transactional leadership style (TAL): TAL is used by leaders to maintain quality and performance and marginally impact improvements (Bass, 1985; Burns 1978). A sample item is "spends time teaching and coaching" (Avolio & Bass, 2004, p. 116).

Transformational leadership style (TFL): TFL is one in which the leader inspires, motivates, develops, and empowers followers (Fischer, 2016). A sample item is "avoids making decisions" (Avolio & Bass, 2004, p. 117).

Scoring. The MLQ 5x-Short includes 12 scales; five for transformational leadership, two for transactional leadership, two for passive-avoidant leadership, and one each for the three outcomes. Each scale score is an average of the items within the scale; missing items are excluded from the average score for each scale, by respondent, as long as there are no more than two missing items (Avolio & Bass, 2004). The lowest possible score for a scale is 0 and highest is 4.

TCM Employee Commitment Survey

Basis for Development. The academic version of the revised TCM Employee Commitment survey created by Meyer, Allen, and Smith, was used for this study. The survey measures employee's commitment to the organization using three subscales: affective commitment scale (ACS), normative commitment scale (NCS), and continuance commitment scale (CCS; Meyer & Allen, 2004). The original version, the TCM of Employee Commitment survey, was created in 1990 and included three subscales with

eight items per subscale (Meyer & Allen, 1990). Further analysis was conducted on the tool and resulted in changes to the tool and the implementation of the current form, the TCM Employee Commitment Survey (Meyer et al., 1993). The revisions included a reduction of the items for each subscale and changing the wording of the NC items to better reflect the constructs (Xu & Bassham, 2010).

Appropriateness for the Study. The TCM Employee Commitment Survey measures employee commitment to the organization (Meyer & Allen, 2004) and ties directly to this study as the DV in this study is OC. The tool includes the concepts and questions to provide data to quantify to what extent LS and GC predict OC. Each research question includes the measurement of staff nurses' OC based on LSs, GC, or the combined effects of LS and GC.

Permission from the Developer. I contacted Dr. Meyer via email, and he provided a link to use the TCM Employee Commitment Survey, for academic purposes, without a fee. The email from Dr. Meyer is included in Appendix I.

Reliability and Validity. Much of the reliability and validity studies have been conducted on the original scales created in 1990 (Meyer & Allen, 2004). Allen and Meyer's (1990) reliability values were 0.87 (AC); CC, 0.75 (CC); and 0.79 (NC). Scores from Dunham et al. (1994) ranged from 0.74-0.87 (AC); 0.73-0.81 (CC); and 0.67 to 0.78 (NC). Consistent findings were identified by Bycio et al (1995) with values of 0.86 (AC), 0.79 (CC), and 0.73 (NC); and Cohen's (1992) scores were 0.79 (AC), 0.69 (CC), and 0.65 (NC).

Validity results revealed the measures were distinguishable from one another (Allen & Meyer, 1990; Bycio et al., 1995; Cohen, 1992: Dunham et al., 1994); Allen and Meyer (1996) revealed reliability scores of 0.85 (AC), 0.79 (CC), and 0.73 (NC) and the factor analysis revealed the three measures are distinguishable from each other. The alpha coefficients were 0.83 (AC), 0.74 (CC), 0.87 (NC), however the ACS and NCS lacked discriminant validity for employees working in Croatia (Sersic, 1999). Herscovitch and Meyer (2002) conducted three studies – one for university students (*N*=244), and two for hospital nurses (*N*=157 and *N*= 108); results revealed alpha levels of 0.78-0.91 (AC). 0.82-0.93 (CC), 0.58-0.82 (NC) for study 1; 0.92 (AC); 0.71 (CC), 0.78 (NC) for study 2; and 0.88 (AC), 0.81 (CC), and 0.74 (NC) for study 3; the three components were found to be generally distinguishable components of OC.

Karim and Noor (2006) studied two scales and results revealed scores of 0.81 (AC) and 0.78 (CC). Neves et al. (2018) utilized confirmatory analysis of the Portuguese version of the tool for nurses and found internal consistency as note by Cronbach alpha ranged from 0.81 (AC), 0.67 (CC), and 0.82 (NC) and factorial loadings were .44 and .38, lower than the standard .50; and overall goodness of fit was 0.82. The differences in the factorial loadings are thought to be related to cultural interpretations, not the tool. The instrument has been tested and found to have strong reliability and validity (Allen & Meyer, 1996; Bycio et al., 1995; Cohen, 1992; Dunhan et al., 1994; Herscovitch & Meyer, 2002; Karim & Noor, 2006; Neves et al., 2018; Sersic, 1999).

Current Use. Most recently the TCM Employee Commitment Survey has been used in education (Bray & Williams, 2017), nursing (Rasheed & Johnson, 2017; Tanabe

et al., 2020), hospitality (Ibrahim, 2020), and the textile industry (Mustafa et al., 2016). Mustafa et al. (2016) used the AC scale to determine if job satisfaction interferes with OC and AC relationships; the reliability level for the AC was 0.773. Bray and Williams (2017) reported reliability scores were found to be consistent and support the use of the constructs in education. Rasheed and Johnson (2017) selected the TCM Employee Commitment Survey to study mental health nurses in Kerala because the instrument had consistent scoring. Ibrahim (2020) used the instrument due to good reliability scores for survey employees in the lodging industry. Tanabe et al. (2020) studied community health nurses in Fiji using the NC scale and found reliability levels of 0.78 to 0.935 and high correlation coefficient (r = 0.284). The instrument has been used in a variety of settings (Bray & Williams, 2017; Mustafa et al., 2016; Ibrahim, 2020), including nursing (Rasheed & Johnson, 2017; Tanabe et al., 2020).

Operational Definitions. For this study, OC was defined using the three subscales of the TCM Employee Commitment Survey, provided below. A sample question is included with each subscale definition.

Affective commitment (AC): AC is the employee's attachment to the organization because they want to be there (Allen & Meyer, 1990; Meyer et al., 1990; Lee, Allen, Meyer & Rhee, 2001). A sample item is "I would be happy to spend the rest of my career with this organization" (Meyer & Allen, 2004, p. 12).

Continuance commitment (CC): CC is the employee's need to remain with the organization (Meyer et al., 1990; Lee et al., 2001). A sample item is "it would be very

hard to leave my organization right now, even if I wanted to" (Meyer, & Allen, 2004, p. 12).

Normative commitment (NC): NC occurs when an employee feels they have an obligation to stay with the organization (Allen & Meyer, 1990; Levine et al., 2019; Meyer & Allen, 1991; Meyer et al., 1993). A sample item is "I would feel guilty if I left my organization right now" (Meyer & Allen, 2004, p. 13).

Scoring. Each scale is scored separately and can be used to create the "commitment profile" for the employees (Meyer & Allen, 2004, p. 2). The rating scale uses a 7-point Likert Scale (1-7): 1= strongly disagree; 2 = disagree; 3 = slightly disagree; 4 = undecided; 5 = slightly agree; 6 = agree; and 7 = strongly agree. Each subscale uses negatively keyed items to control for acquiescence response bias (Meyer et al., 1993). Meyer and Allen (2004) explain the negatively keyed items must be rescored (i.e., 1 = 7) before scoring. The scores for each scale are averaged to obtain an overall score for each of the three components, the higher the score, the stronger the commitment. Meyer and Allen (2004) recommend scores be reported at the subscale level and use an ANOVA to compare commitment levels by groups; a one-way ANOVA was used in this study.

Data Analysis Plan

Software. I used the Walden University provided SPSS IBM Statistics Version 25 software to analyze the data.

Data Cleaning and Sweeping. Data screening was conducted to ensure accuracy of the data collected and to check for missing data and outliers (Mertler & Reinhart, 2017). The data file was viewed and each column checked for missing data and outliers.

The minimum acceptable sample was 159, however, in anticipation of the potential for missing data of 15 to 20% (Enders, 2003, as cited in Dong & Peng, 2013), the plan was to use imputation if a variable had more than 15% missing data as recommended by Mertler and Reinhart (2017). The data was cleaned every one to two weeks using the criteria for each survey tool to determine if a participant's response could be included in the data analysis; this was conducted until the sample size was reached. The presence of outliers was addressed using scatterplots to identify if the data revealed a normal distribution. The presence of multivariate outliers was evaluated using *Cook's distance* (Gao et al., 2015); D_i values of 1 or greater are considered influential values (Cook, 1977). The plan to address outliers was to check for data entry errors, if no errors were found, outliers were removed from the sample (Mertler & Reinhart, 2017).

Research Questions and Hypotheses

The following central research questions were addressed in the study:

- RQ1: Is there a difference in staff nurses' organizational commitment (affective, continuance, and normative) by generational cohort?
    - H_0: There is no difference in staff nurses' organizational commitment (affective, continuance, and normative) by generational cohort.
    - H_a: There is a difference in staff nurses' organizational commitment (affective, continuance, and normative) by generational cohort of staff nurses.

- RQ2: Is there a difference in staff nurses' organizational commitment (affective, continuance, and normative) based on leadership style?
    - H_0: There is no difference in staff nurses' organizational commitment (affective, continuance, and normative) based on leadership style.
    - H_a: There is a difference in staff nurses' organizational commitment (affective, continuance, and normative) based on leadership style.
- RQ3: What is the combined effect of generational cohort and leadership style in predicting staff nurses' organizational commitment (affective, continuance, and normative)?
    - H_0: Generational cohort and leadership style are not predictors of staff nurses' organizational commitment (affective, continuance, and normative).
    - H_a: Generational cohort and leadership style are predictors of staff nurses' organizational commitment (affective, continuance, and normative).

Statistical Tests

The statistical tests included descriptive statistics, one-way ANOVA (RQ1 and RQ2), and a GLM (RQ3). What follows is an explanation of each of the statistical tests, the rationale for selecting the statistical tests, and how the results were interpreted.

Descriptive statistics were used to summarize the data for each variable within the sample and included the frequency distribution, measures of central tendency (mean, median, or mode), and dispersion (standard deviation and range; Warner, 2013). The results are presented as a frequency table (Gray et al., 2017).

The one-way ANOVA provides the ability to compare the means between groups to determine if the means are statistically different from each other (Gray et al., 2017). The assumptions of normality, sample independence, and homogeneity of the variance must be ensured. The assumption of normality is generally not compromised for a large N which was the case for this study. However, the skewness and kurtosis and the histogram were also assessed. (Gray et al., 2017; Warner, 2013). Sample independence refers to one observation not being related to another. Sample independence was promoted by the use of a cross-sectional design. The Levene's test was performed to assess for violations of homogeneity of the variance (Warner, 2013). The Levene's test was performed to identify the *F* score to determine if there were differences between the IVs. When homogeneity was met, the Tukey's honestly significant different (HSD) test was conducted (Gray et al., 2017); when not met, the Welch's F test was run as it is robust to detect violations of the homogeneity assumption (Field, 2013).

The GLM with main effects was used as it provides the ability to test the model that LS and GC contribute significantly to the prediction of OC using categorical variables with more than two groups each (*Introduction to regression*, n. d.; Gray et al., 2017). The data was tested for the assumptions of normality of

the residuals, linearity, outliers, homoscedasticity, and absence of multicollinearity (Gray et al., 2017; Mertler & Reinhardt, 2017; Warner, 2013).

Normality of residuals is the assumption that residuals are normally distributed by assessing for skewness and kurtosis. If the data was not normally distributed a data transformation (Gray et al., 2017; Warner, 2013) would be considered. The presence of multivariate outliers was evaluated using Cook's distance (Gao et al., 2015); D_i values of 1 or greater are considered influential values (Cook, 1977); if outliers were present, the data was reviewed for errors and if none are present, the outlier would be dropped (Mertler & Reinhart, 2017).

Linearity is the assumption that the data has a linear relationship and is tested using a scatterplot (Gray et al., 2017). The results will be either positive (the IV and DV increase together) or negative (as the IV either increases or decreases, the DV moves in the opposite direction). Non-linearity, if present, would be addressed using data transformations (Mertler & Reinhardt, 2017). Homoscedasticity is the assumption there are equal variances between each IV and the DV; the assumption is tested using the Levene's test (Warner, 2013).

The Levene's test tests the null hypotheses. A *p*-value of less than 0.05 indicates the variance among the variables is not equal and can therefore reject the null hypothesis (Warner 2013). In this case, a Tukey post hoc analysis was be conducted. Homoscedasticity was tested using the *Breusch-Pagan test for Hetersoskedasticity* to identify if there is uniform variance of Y across levels of X. Log transformation would be considered if there were violations (Warner,

2013). Multicollinearity is tested using the variance inflation factors (VIF) (Warner, 2013). A score of 10 or above reveals the IVs are strongly correlated with each other (Mertler & Reinhart, 2017) which impacts the generalizability of the findings and are said to lack predictive validity (Gray et al., 2017). Multicollinearity may be addressed by removing IVs with high VIF values (Mertler & Reinhart, 2017).

Threats to Validity

External Validity

Threats to external validity reduce the generalizability of the results (Warner, 2013) and efforts were taken to increase external validity. The threat to external validity was being able to obtain enough participants by GC to generalize to a larger population (Gray et al., 2017). External validity was enhanced by using screening questions (adult, license, direct patient care, type of unit, and role); recruiting from two hospitals, LinkedIn, nursing organizations, the Florida Health Portal, and snowball sampling.

Internal Validity

Internal validity is the extent to which the study determines cause and effect between the IV and DV (Warner, 2013). The cross-sectional design limits the ability to determine cause and effect, an inherent threat to internal validity (Gray et al., 2017). To promote generalizability, the MLQ 5x-Short and TCM Employee Commitment Survey were used in the survey. Both instruments have been psychometrically tested and have been demonstrated to be reliable and valid for participants from different generations (Christopher et al.,2018; Glazer et al, 2019.; Jenna, 2016; Jones, 2015).

Construct Validity

Construct validity is the degree to which a study measures the concepts it is supposed to measure (Cronbach & Meehl, 1955; Gray et al., 2017; Strauss & Smith, 2009). Construct validity was enhanced through the use of survey instruments, specifically the MLQ 5x-Short (Avolio & Bass, 2004; Boamah & Tremblay, 2019; Dimitrov & Darova, 2016); and TCM Employee Commitment Survey (Allen & Meyer, 1996; Bycio et al., 1995; Cohen, 1992; Dunhan et al., 1994; Herscovitch & Meyer, 2002; Karim & Noor, 2006; Neves et al., 2018; Sersic, 1999) that have strong reliability and validity scores.

Ethical Procedures

Agreements to Gain Access to Participants

Two hospitals and four nursing organizations agreed to participate in the study. Hospital 1 was a partner organization and deferred to the Walden IRB for review and approval of the study; Hospital 2 was a partner organization and selected to receive Walden University IRB approval before providing the hospital IRB approval. Each hospital used a site representative to post the recruitment flyer (see Appendix C) and email the recruitment letter to volunteers at the designated times. Agreements were not needed for snowball sampling or to gain access to the nursing organizations, LinkedIn, or the Florida Health Portal.

Treatment of Human Participants

Informed consent must be obtained in accordance with the U.S. Department of Health & Human Services (n. d.) regulations of 45 CFR part 46 to protect human subjects

in research. A consent form to participate was created using the Walden University template and was used to obtain volunteers' informed consent. Volunteers accessed the consent form by clicking on a link that was created in SurveyMonkey (survey management tool) and included in the recruitment letter. Volunteers wishing to participate were instructed to review the consent form and click on "I consent". My name and contact information were included on the recruitment flyer and in the recruitment letter should potential participants have questions. To ensure confidentiality of the participants, *anonymous responses* was turned on during the setup of the survey which prevented the collection of participant information (participant email and IP address; SurveyMonkey, 2020).

Treatment of the Data

Confidential Data. The demographic question included the date spans for each GC; for this reason, the data was confidential rather than anonymous. To ensure confidentiality for participants, anonymous responses were allowed during the setup of the survey, preventing the collection of participants' emails and IP addresses (SurveyMonkey, 2020).

Data Storage. Data were downloaded from SurveyMonkey to an electronic file stored on my password-protected laptop and backed up on an external hard drive. Once the data collection was complete, the data was deleted from SurveyMonkey by selecting "remove all responses" in *Analyze Results*. The external hard drive and laptop were locked in a file cabinet when not in use, for which I have the only key. The file cabinet is located in a secure room behind a locked door. Once the data was analyzed, the data was

deleted from the laptop and kept on the external hard drive only. The external hard drive is stored in the locked file cabinet described earlier and will remain there for a period of at least 5 years and then destroyed.

Other Ethical Issues. No ethical issues were identified during data collection. The possibility of ethical issues was limited as there were no power differentials, I did not work at the hospitals, potential participants had the final decision to open the email and to respond to the survey, incentives were not used, and there was no apparent conflict of interest. In addition, I reviewed the Red Flag Issues section of the Walden University Center for Research Quality (2020) and identified that the topic was not sensitive in nature and the participants were not members of a vulnerable population.

Summary

The purpose of this quantitative descriptive cross-sectional study was to explore the combined effects of GC and LS on staff nurses' OC. I used three instruments: a researcher developed demographic question to obtain the participant's GC based on the Pew Research Center's categorizations, the MLQ 5x-Short rater form, and the TCM Employee Commitment Survey. The survey was distributed to and completed electronically by nurses who dedicate at least 50% of their workday to providing clinical services to patients and their families. Participants were recruited from two hospitals, four nursing organizations, the Florida Health Portal, and nationwide via snowball sampling. The minimum sample size for the study was 200. Confidentiality of all participants was maintained. The data was analyzed using descriptive statistics, a one-way ANOVA, and a

GLM (main effects). Data were kept secure and password-protected. Results of the study are presented in the aggregate with no participant identifying information.

In this chapter, the rationale for the use of the quantitative design was discussed. Recruitment of nurses from hospitals and nursing organizations, the Florida Health Portal, and nationwide via LinkedIn and snowball sampling was explained. The MLQ 5x-Short and TCM employee commitment survey were addressed, and data analysis tools, specifically descriptive statistics, one-way ANOVA, and GLM, were discussed in terms of their applicability to this study. Threats to validity and actions taken to limit threats were discussed, along with methods used to maintain participants' confidentiality. Data collection protections were explained and included the use of SurveyMonkey to deliver surveys, as well as data storage during data collection during and after the study was completed. This was followed by a discussion of ethical procedures. Chapter 4 includes data collection, results, and a summary.

Chapter 4: Results

The purpose of this descriptive cross-sectional study was to establish whether OC differs according to LS and GC individually, and then explore the combined effects of GC and LS on staff nurses' OC. The TLT and GT were the theoretical foundations used to conduct this study. Research questions and hypotheses were as follows:

- RQ1: Is there a difference in staff nurses' organizational commitment (affective, continuance, and normative) by generational cohort?
    - H_0: There is no difference in staff nurses' organizational commitment (affective, continuance, and normative) by generational cohort.
    - H_a: There is a difference in staff nurses' organizational commitment (affective, continuance, and normative) by generational cohort of staff nurses.
- RQ2: Is there a difference in staff nurses' organizational commitment (affective, continuance, and normative) based on leadership style?
    - H_0: There is no difference in staff nurses' organizational commitment (affective, continuance, and normative) based on leadership style.
    - H_a: There is a difference in staff nurses' organizational commitment (affective, continuance, and normative) based on leadership style.

- RQ3: What is the combined effect of generational cohort and leadership style in predicting staff nurses' organizational commitment (affective, continuance, and normative)?
    - H_0: Generational cohort and leadership style are not predictors of staff nurses' organizational commitment (affective, continuance, and normative).
    - H_a: Generational cohort and leadership style are predictors of staff nurses' organizational commitment (affective, continuance, and normative).

In this chapter, data collection procedures, the timeframe for data collection , demographic information, data collection plan, and results of data analysis are explained. I answered the research questions by addressing the hypotheses.

Data Collection

Time Frame

Data from two hospitals in the Northeastern U.S. (Hospital A and Hospital B) were included the sample. Data collection began on January 18, 2021 at Hospital A, on February 16, 2021 at Hospital B, on March 26, 2021 for LinkedIn and the professional nursing organizations, and on April 29, 2021 for the Florida Health Portal. Data collection concluded on July 12, 2021.

Response Rates

My goal was to obtain a minimum of 240 participants to meet the sample size (n = 200) as calculated via G*Power for the one-way ANOVA (power = 0.8, medium effect,

one-tailed, and alpha = 0.05). After 5 months of data collection, the sample size was not reached, and there were less than four responses each for the Silent Generation and Generation Z. I spoke with the chair of my committee and a Walden University methodologist, and both agreed I should run a post-hoc analysis to determine if power was met with those who did respond to the survey. Of 32,000 potential participants, 160 completed the survey (see Table 1).

Table 1

Sources of Data, Response Rates, and Responses for Data Analysis

Method	Potential Participants	Completed Screening Questions	Disqualified	Started Survey	Completed Survey	Response Rate
Hospitals	688	128	39	89	65	12.94%
LinkedIn	293	15	1	14	14	4.77%
Nursing Organizations	315	21	11	10	10	3.17%
Florida	30,704	105	26	79	70	0.26%
Total	32,000	269	77	181	160	0.57%

Discrepancies to Data Collection Plan

The study plan was followed as planned; however, I sought and received approval from my chair and the IRB to conduct several changes in my data collection process in order to ensure the sample size would allow me to answer all of my research questions. The needed sample size was recalculated post hoc using G*Power. The new needed sample size was $n = 159$ and was reached ($N = 160$) on July 12, 2021. Three of the five GCs were included in the analysis; the Silent Generation and Generation Z were excluded due to an insufficient number of participants.

The original plan included surveying staff nurses working in three hospitals. One of the hospitals requested a change to RQ 2 after the proposal was approved by the IRB,

and data collection had started at one of the other hospitals. The IRB was informed and, on February 16, 2021, gave approval to continue the study, with committee approval, without the third hospital. Two additional changes were approved by the IRB and are discussed in this section.

Hospital site representatives for the two hospitals posted the recruitment flyer 1 week prior to emailing nurses recruitment letters. Reminder letters were emailed 2 and 4 weeks after the recruitment letter was sent. Despite actions taken to engage the nurses to participate, the anticipated sample size of 200 was not reached.

In an effort to obtain the needed sample size, I submitted a Request for Change in Procedures form to the IRB and received approval on March 25, 2021 to survey members of four nursing organizations and to post the recruitment letter on LinkedIn The presidents of the professional nursing organizations emailed the recruitment letter, once, to their members. The recruitment letter was posted four times (initially and after 1,2, and 3 weeks) on LinkedIn. More participants were needed to obtain the anticipated minimum sample size of 200. The consent form and recruitment letter (see Appendix F) were changed to address the survey link language. The original included a different link for each hospital and was changed to a different survey link for each method of recruitment.

I submitted an additional Request for Change in Procedure form to the IRB to email recruitment letters to nurses listed in the Florida Health Portal with a current license and a reported practice location, and to reduce the time to complete the survey from 45 to 25 minutes. The IRB approved the request on April 27, 2021. The recruitment

letters (see Appendix G) were sent beginning on April 29, 2021. Data collection ended on July 12, 2021.

Results

Demographic Characteristics

Per the data analysis plan, the Silent Generation and Generation Z responses were excluded from data analysis because there were less than four responses from each group. There were only two respondents from Generation Z and one from the Silent Generation. The removal of the Silent Generation and Generation Z from the study required a new calculation of sample size. After consultation with my committee chair and a methodologist from the Center for Research Quality regarding data collection to date and the current sample size, both agreed I should stop data collection and run a post-hoc power analysis. Using G*Power, the new sample size was calculated at 159 for the One-way ANOVA (power = 0.8, medium effect size, and alpha = 0.05). The results of the post-hoc analysis indicated that the sample size was sufficient to obtain at least 80% power (see Table 2). Therefore, GCs included in the data analysis were limited to Boomer, Generation X, and Generation Y cohorts.

Table 2

Post-Hoc Analysis: Effect Size and Achieved Power for One-Way ANOVA Results

Groups	Effect Size f	Power
Affective Commitment & Generational Cohort	0.21	80.48%
Affective Commitment & Leadership Style	0.54	80.48%
Continuance Commitment & Generational Cohort	0.25	80.48%
Continuance Commitment & Leadership Style	0.12	80.48%
Normative Commitment & Generational Cohort	0.18	80.48%
Normative Commitment & Leadership Style	0.50	80.48%

Table 3 includes descriptive statistics for GC and LS. The descriptive statistics show a balanced distribution of GC for the sample (N = 160). The data analysis is presented by research question.

Table 3

Descriptive Statistics for Organizational Commitment by Categories of Generational Cohort and Leadership Style (N = 160)

IV			AC		CC		NC	
Generational Cohort	N	Percent	Mean	SD	Mean	SD	Mean	SD
Boomer Generation	54	33.75	4.0648	1.3758	3.9006	1.2404	3.6265	1.3085
Generation X	55	34.38	4.4242	1.4666	3.9551	1.3342	4.0509	1.4736
Generation Y	51	31.87	4.5784	1.2066	3.3895	1.2406	3.8398	1.4498
Leadership Style								
TFL	85	53.13	4.8439	1.2728	3.6772	1.2089	4.2992	1.2336
TAL	38	23.75	4.0026	1.1694	3.7166	1.1579	3.4464	1.3971
PAL	37	23.13	3.5810	1.3886	3.9792	1.5809	3.1909	1.4772

Note. Affective Commitment (AC); Continuance Commitment (CC); Normative Commitment (NC); Transformational Leadership (TFL); Transactional Leadership (TAL); Passive-Avoidant Leadership (PAL).

Representativeness

The sample (see Table 3) reflected the general representation of the nursing work force by GC with 33.75% for the Boomer Generation, 34.38% for Generation X, and 31.87% for Generation Y, as compared to the most current nursing work for data: the Boomer Generation (32%), Generation X (39%), and Generation Y (26%; Moore et al., 2016), and ages less than 30 (8.5%); 30-39 (22.2%), 40-54 (31.5%), and 55-64 (23.9%; U.S. Department of Health and Human Services, et al., 2019). The increase in Generation Y is consistent with work done by Dr. Fry (2018) at the Pew Research Center that reports that Generation Y is now the largest generation in the U.S. Labor force.

Testing Underlying Assumptions

Prior to testing the underlying assumptions of the analysis, the data was examined for missing values and outliers. The plan was to use imputation if a variable had more than 15% missing data (Mertler & Reinhart, 2017), however imputation was not required because all of the variables had rates of missing data less than 1%.

In accordance with the MLQ Scoring Key, "blank answers should not be included in the calculation" (Avolio & Bass, 2004, p. 120) of the averages by scale. The means were calculated based on the items that were answered, not the number of items in the scale. There were 10 missing responses to the MLQ 5x-Short items; the missing data were excluded from the calculations.

Missing data was found three times for the ACS, four times for the CCS, and six times for the NCS. The TCM Employee Commitment Survey includes four reverse-keyed items. For scoring, the reverse-keyed items were re-coded prior to scoring as follows: 1 = 7, 2 = 6, and 3 = 5; higher scores indicate stronger commitment (Meyer & Allen, 2004). The scores for the three scales (ACS, CCS, and NCS) were obtained by averaging the scores for the items for each scale by respondent regardless of the presence of missing data.

Research Question 1

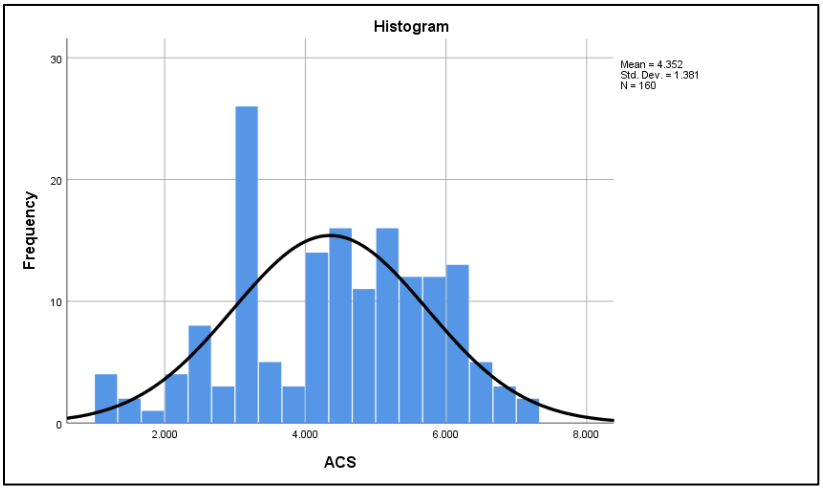
A one-way ANOVA, using SPSS software version 25, was conducted for each OC scale (AC, CC, & NC) to answer the research question: Is there a difference in staff nurses' organizational commitment (affective, continuance, and normative) by generational cohort?

Affective Commitment and Generational Cohort

The data for AC and GC met all of the underlying assumptions to perform a one-way ANOVA. The assumption of normality was tested for AC; results revealed the assumption was met as the skewness (-.282) and kurtosis (-.576) were within +/- 1, and the histogram (Figure 1) is showing a normal curve. The assumption of homogeneity of variance was tested using the Levene's test. The result [$F(2, 157) = 1.342$, $p = 0.264$]; the $p > 0.05$ suggests the assumption is met, and the null hypothesis is not rejected.

Figure 1

Affective Commitment and Generational Cohort Histogram



The one-way ANOVA analysis resulted in no statistical difference between GC groups [$F(2, 157) = 1.951$, $p = .146$] on AC. A Tukey post hoc test for multiple comparisons (see Table 4) revealed no between groups differences in staff nurses' AC between the Boomer Generation when compared to Generation X ($p = 0.361$) and GenY ($p = 0.138$), and between Generation X and Generation Y ($p = 0.832$).

Table 4

Multiple Comparisons: Affective Commitment and Generational Cohort

Generational Cohort	Comparison	Mean Difference	*SE*	*P*	95% Confidence Interval	
					Lower Bound	Upper Bound
Boomer Generation	Generation X	-.359428	.263020	.361	-.98177	.26292
	Generation Y	-.513617	.268081	.138	-1.14794	.12070
Generation X	Boomer Generation	.359428	.263020	.361	-.26292	.98177
	Generation Y	-.154189	.266895	.832	-.78570	.47732
Generation Y	Boomer Generation	.513617	.268081	.138	-.12070	1.14794
	Generation X	.154189	.266895	.832	-.47732	.78570

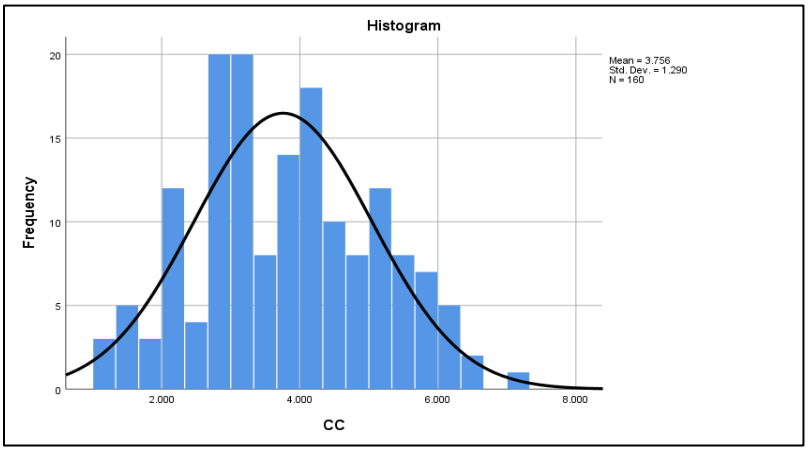
Note. Multiple comparisons based on Tukey HSD *The *p* value is significant at the 0.05 level.

Continuance Commitment and Generational Cohort

The data for CC and GC met all of the underlying assumptions to perform a one-way ANOVA. The assumption of normality was tested for CC; results revealed the assumption was met as the skewness (.139) and kurtosis (-.576) were within +/- 1, and the histogram (Figure 2) is showing a normal curve. The assumption of homogeneity of variance was tested using the Levene's test. The result [$F(2, 157) = 0.339$, $p = 0.713$]; the $p > 0.05$ suggests the variances between the three groups is not statistically different, the assumption is met, and the null hypothesis is not rejected.

Figure 2

Continuance Commitment and Generational Cohort Histogram



The one-way ANOVA analysis resulted in a statistically significant difference between groups [$F(2, 157) = 3.132$, $p = 0.046$]. However, a Tukey post hoc test for multiple comparisons (see Table 5) revealed no between groups differences in staff nurses' CC between the Boomer Generation when compared to Generation X ($p = 0.973$), between the Boomer Generationand Generation Y ($p = 0.103$), and Generation X and Generation Y ($p = 0.061$). Based on the results, the global effects between staff nurses' CC by GC is significant ($p = 0.046$), however the multiple comparisons are non-significant. The effects are assumed to be related to error.

Table 5

Multiple Comparisons: Continuance Commitment and Generational Cohort

Generational Cohort	Comparison	Mean Difference	*SE*	*P*	95% Confidence Interval	
					Lower Bound	Upper Bound
Boomer Generation	Generation X	-.054534	.243974	.973	-.63181	.52275
	Generation Y	.511075	.248669	.103	-.07731	1.09946
Generation X	Boomer	.054534	.243974	.973	-.52275	.63181
	Generation Y	.565609	.247568	.061	-.02017	1.15139
Generation Y	Boomer	-.511075	.248669	.103	-1.09946	.07731
	Generation X	-.565609	.247568	.061	-1.15139	.02017

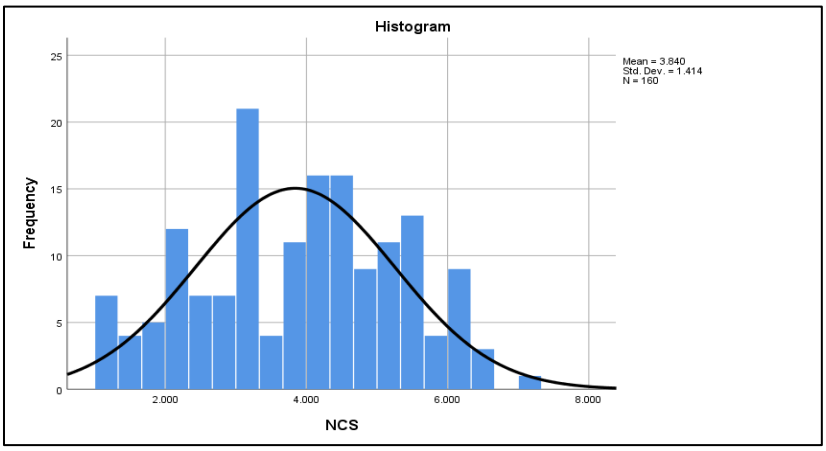
Note. Multiple comparisons based on Tukey HSD *The *p* value is significant at the 0.05 level.

Normative Commitment and Generational Cohort

The data for NC and GC met all of the underlying assumptions to perform a one-way ANOVA. The assumption of normality was tested for NC; results revealed the assumption was met as the skewness (.111) and kurtosis (-.735) were within +/- 1, and the histogram (Figure 3) is showing a normal curve. The assumption of homogeneity of variance was tested using the Levene's test. The result [$F(2, 157) = 0.301$, $p = 0.740$]; the $p > 0.05$ suggests the variances between the three groups is not statistically different, the assumption is met, and the null hypothesis is not rejected.

Figure 3

Normative Commitment and Generational Cohort Histogram



The one-way ANOVA analysis resulted in no statistical difference between GC groups as [$F(2, 157) = 0.1.230$, $p = 0.295$] on NC. A Tukey post hoc (see Table 6) revealed no between groups differences in staff nurses' NC between the Boomer Generation when compared to Generation X ($p = 0.262$), between the Boomer Generation and Generation Y ($p = 0.720$), and Generation X and Generation Y ($p = 0.723$).

Table 6

Multiple Comparisons: Normative Commitment and Generational Cohort

Generational Cohort	Comparison	Mean Difference	*SE*	*P*	95% Confidence Interval	
					Lower Bound	Upper Bound
Boomer Generation	Generation X	-.424366	.270546	.262	-1.06452	.21579
	Generation Y	-.213326	.275752	.720	-.86580	.43915
Generation X	Boomer	.424366	.270546	.262	-.21579	1.06452
	Generation Y	.211040	.274532	.723	-.43854	.86062
Generation Y	Boomer	.213326	.275752	.720	-.43915	.86580
	Generation X	-.211040	.274532	.723	-.86062	.43854

Note. Multiple comparisons based on Tukey HSD. * The *p* value is significant at the 0.05 level.

Research Question 2

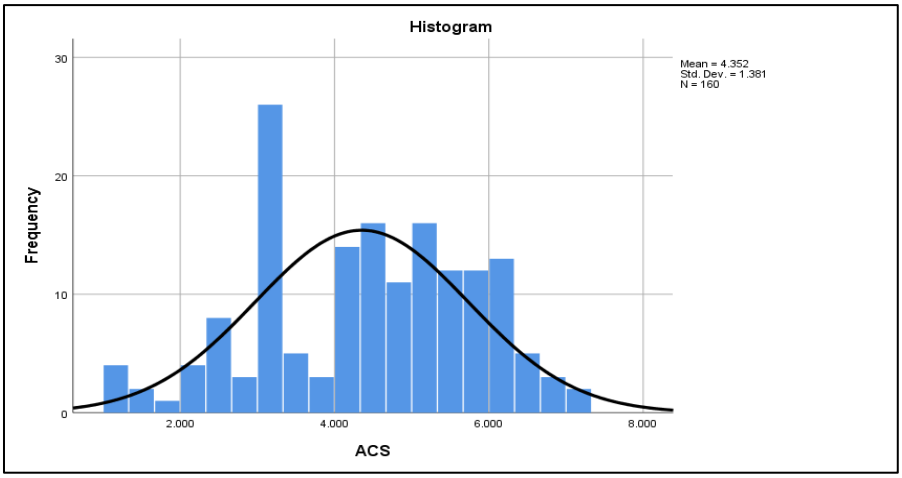
A one-way ANOVA, using SPSS software version 25, was conducted for each OC scale (AC, CC, & NC) to answer the research question: Is there a difference in staff nurses' organizational commitment (affective, continuance, and normative) by leadership style?

Affective Commitment and Leadership Style

The data for AC and LS met all of the underlying assumptions to perform a one-way ANOVA. The assumption of normality was tested for AC; results revealed the assumption was met as the skewness (-.282) and kurtosis (-.576) were within +/- 1, and the histogram (Figure 4) is showing a normal curve. The assumption of homogeneity of variance was tested using the Levene's test. The results [$F(2, 157) = 0.447$, $p = 0.641$]; the p is > 0.05 suggest, the assumption was met.

Figure 4

Affective Commitment and Leadership Style Histogram



The one-way ANOVA analysis resulted in a statistically significant difference between LS groups [$F(2, 157) = 14.467$, $p = 0.001$] on AC. A Tukey post hoc test for multiple comparisons (see Table 7) revealed that there was a statistically significant difference in staff nurses' AC between the TFL group and the TAL group [-.8412, 95% *CI* (.25157, 1.431), $p = 0.003$], and between the TFL group and the PAL group [1.2628, 95% *CI* (.66763, 1.8580), $p < .001$]. There was no statistically significant difference between the TAL and PAL groups ($p = 0.328$). Those nurses who preferred TFL tended to have a higher AC as compared to staff nurses who preferred TAL ($p = 0.003$) and those who preferred PAL ($p = 0.001$). There is no difference in AC among staff nurses who preferred PAL and TAL ($p = 0.328$).

Table 7

Multiple Comparisons: Affective Commitment and Leadership Style

Leadership Style	Comparison	Mean Difference	*SE*	*P*	95% Confidence Interval	
					Lower Bound	Upper Bound
TFL	TAL	.8412900	.2492336	.003*	.251565	1.431015
	PAL	1.2628405	.2515503	.001*	.667634	1.858047
TAL	TFL	-.8412900	.2492336	.003*	-1.431015	-.251565
	PAL	.4215505	.2949804	.328	-.276418	1.119519
PAL	TFL	-1.2628405	.2515503	.001*	-1.858047	-.667634
	TAL	-.4215505	.2949804	.328	-1.119519	.276418

Note. Multiple comparisons based on Tukey HSD * The *p* value is significant at the 0.05 level.

Note. Transformational Leadership (TFL); Transactional Leadership (TAL); Passive-Avoidant Leadership (PAL).

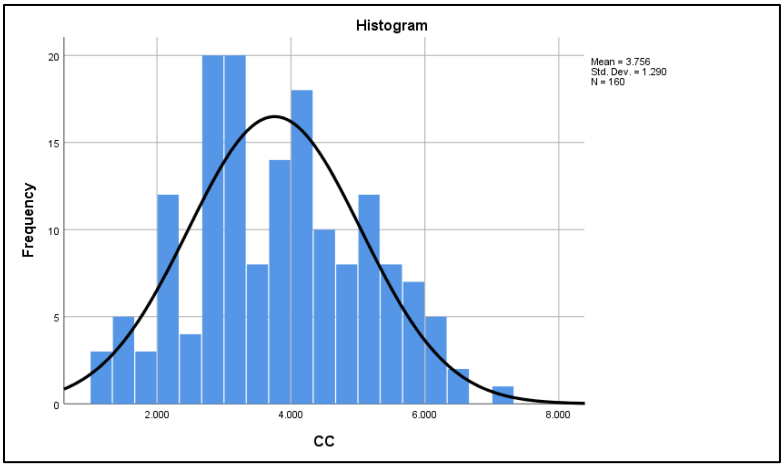
Continuance Commitment and Leadership Style

The underlying assumptions to perform a one-way ANOVA were met. The assumption of normality was tested for CC; results revealed the assumption was met as the skewness (.139) and kurtosis (-.576) were within +/- 1, and the histogram (Figure 5) is showing a normal curve. The assumption of homogeneity of variance was tested using

the Levene's test. The results [$F(2, 157) = 4.339$, $p = 0.015$] suggest the variances between the three groups is statistically significant. The Welch's F test was run to detect the violations. The results [$t(2) = 0.538$, $p = 0.586$] suggest the variances between the three groups is not statistically significant, the assumption is met, and the null hypothesis is rejected.

Figure 5

Continuance Commitment and Leadership Style Histogram



The one-way ANOVA analysis resulted in no statistical difference between groups [$F(2, 157) = 0.727$, $p = 0.485$] on CC. A Tukey post hoc test for multiple comparisons (see Table 8) revealed no between group differences in staff nurses' CC between TFL when compared to TAL ($p = 0.987$), between TFL and PAL ($p = 0.463$), and TAL and PAL ($p = 0.654$). There was no difference in CC among the leadership style groups.

Table 8

Multiple Comparisons: Continuance Commitment and Leadership Style

Leadership Style	Comparison	Mean Difference	*SE*	*P*	95% Confidence Interval	
					Lower Bound	Upper Bound
TFL	TAL	-.0394118	.2522625	.987	-.636303	.557480
	PAL	-.3020244	.2546074	.463	-.904464	.300416
TAL	TFL	.0394118	.2522625	.987	-.557480	.636303
	PAL	-.2626126	.2985653	.654	-.969064	.443839
PAL	TFL	.3020244	.2546074	.463	-.300416	.904464
	TAL	.2626126	.2985653	.654	-.443839	.969064

Note. Multiple comparisons based on Tukey HSD * The *p* value is significant at the 0.05 level.

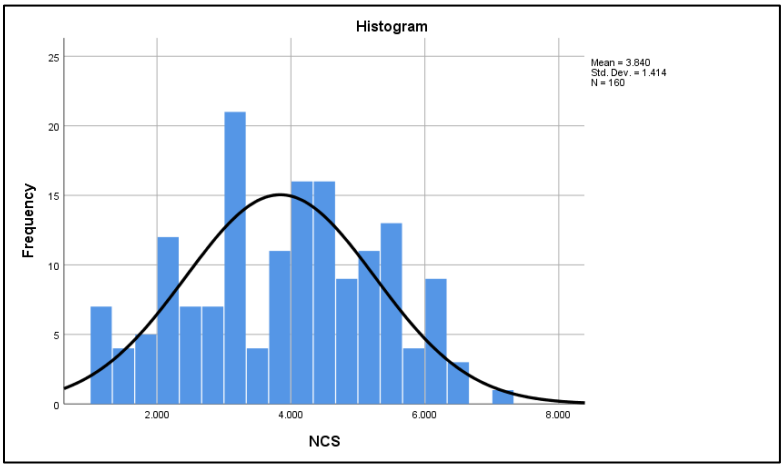
Note. Transformational Leadership (TFL); Transactional Leadership (TAL); Passive-Avoidant Leadership (PAL).

Normative Commitment and Leadership Style

The underlying assumptions to perform a one-way ANOVA were met. The assumption of normality was tested for NC; results revealed the assumption was met as the skewness (-.111) and kurtosis (-.735) were within +/- 1, and the histogram (Figure 6) is showing a normal curve. The assumption of homogeneity of variance was tested using the Levene's test. The results [$F(2, 157) = 1.133$, $p = 0.325$]; the p is > 0.05 suggest, the assumption was met.

Figure 6

Normative Commitment and Leadership Style Histogram



The one-way ANOVA analysis resulted in a statistically significant difference between groups [$F(2, 157) = 11.098$, $p = 0.001$]. A Tukey post hoc test for multiple comparisons (see Table 9) revealed that there was a statistically significant difference in staff nurses' NC between the TFL group and the TAL group [.8527, 95% *CI* (.23760, 1.46785), $p = 0.004$], and between the TFL group and the PAL group [-1.1082, 95% *CI* (.48739, 1.72906), $p = 0.001$]. There was no statistically significant difference between the TAL and PAL groups ($p = 0.685$). Those nurses who preferred TFL tended to have a higher NC as compared to staff nurses who preferred TAL ($p = 0.004$) and those who preferred PAL ($p = 0.001$). There is no difference in NC among staff nurses who preferred PAL and TAL ($p = 0.685$).

Table 9

Multiple Comparisons: Normative Commitment and Leadership Style

Leadership Style	Comparison	Mean Difference	*SE*	*P*	95% Confidence Interval	
					Lower Bound	Upper Bound
TFL	TAL	.8527245	.2599670	.004*	.237603	1.467856
	PAL	1.1082247	.2623835	.001*	.487395	1.729064
TAL	TFL	-.8527245	.2599670	.004*	-1.467846	-.237603
	PAL	.25550002	.3076840	.685	-.472527	.983528
PAL	TFL	-1.1082247	.2623845	.001*	-1.729064	-.487385
	TAL	-.2555002	.3076840	.685	-.983528	.472527

Note. Multiple comparisons based on Tukey HSD * The *p* value is significant at the 0.05 level.

Note. Transformational Leadership (TFL); Transactional Leadership (TAL); Passive-Avoidant Leadership (PAL).

Research Question 3

GLM main effects (an extension of multiple linear regression), using SPSS software version 25, was conducted for each OC scale (AC, CC, & NC) to answer the research question: What is the combined effect of generational cohort and leadership style in predicting staff nurses' organizational commitment?

The analysis was for each of the three OC scales (AC, CC, NC). Two underlying assumptions required to perform GLM were met. The assumption of a continuous DV was met; the assumption of independence of observations was met due to the cross-sectional design and data was randomly sampled. The remaining underlying assumptions included examination and removal of outliers, normality of the distribution of the DV, linearity, homogeneity, and multicollinearity.

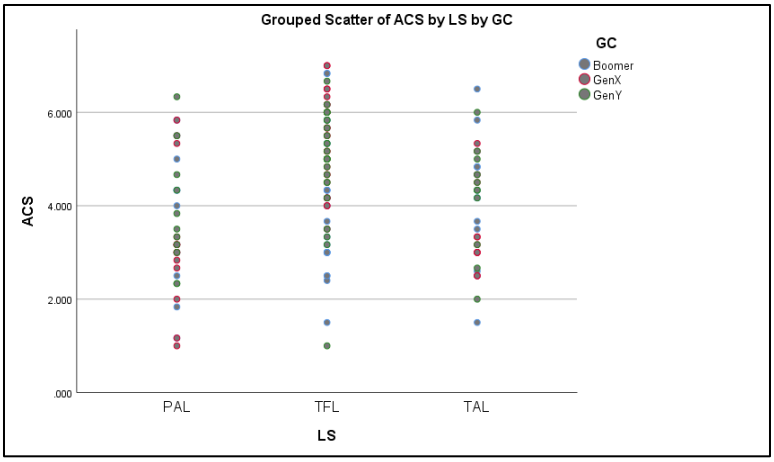
Main Effects Predictors of Affective Commitment

Testing Underlying Assumptions

The assumption of normality of residuals for AC was met as evidenced the skewness (-.282) and kurtosis (-.576) being within +/- 1. The scatterplot showed the data pattern was linear, therefore the assumption of linearity was met (Figure 7). The presence of multivariate outliers was evaluated using Cook's Distance. There were no values of 1 or greater indicating the assumption of the absence of outliers was met. The *Levene's test* ($p = 0.221$) was not significant indicating there was homogeneity of variances and the assumption was met. The Breusch-Pagan test for Heteroskedasticity ($p = 0.166$) was not significant which indicates the assumption of homoskedasticity has been met. The collinearity diagnostics indicated that the assumption of absence of multicollinearity has been met (VIF = 1.001).

Figure 7

Grouped Scatter of Affective Commitment by Generational Cohort and Leadership Style



Descriptive statistics are provided in Table 10. The combined effects of GC and LS on staff nurses' AC was significant [$F(4,155) = 8.247$, $p = 0.001$). The model explained approximately 15.4% ($R^2 = 0.154$) of the variability in AC. However, only LS [$F(2,155) = 14.214$, $p = 0.001$)] was a significant independent predictor of staff nurses' AC; GC was not ($F(2,155) = 1.867$, $p = .158$).

Table 10

Affective Commitment Descriptive Statistics

Generational Cohort	Leadership Style	Mean Difference	SD	N
Boomer	TFL	4.14444	1.420575	27
Generation	TAL	4.17333	1.294322	15
	PAL	3.75000	1.441625	12
	Total	4.06481	1.375808	54
Generation X	TFL	5.33333	.954314	29
	TAL	3.62500	1.010363	12
	PAL	3.22619	1.459726	14
	Total	4.42424	1.466645	55
Generation	TFL	5.00575	1.152536	29
	TAL	4.18182	1.158194	11
	PAL	3.84848	1.263713	11
	Total	4.57843	1.260667	51
Total	TFL	4.84392	1.272784	85
	TAL	4.00263	1.169415	38
	PAL	3.58108	1.388679	37
	Total	4.35208	1.381133	160

Note. Transformational Leadership (TFL); Transactional Leadership (TAL); Passive-Avoidant Leadership (PAL).

The parameter estimates were generated to determine the effect of each category of each independent variable on AC (see Table 11). Generation Y was used as the reference category for the GC comparisons. A nurse from the Boomer Generation tended to have a decreased AC (0.455) when compared to a Generation Y nurse. Likewise, Generation X decreased staff nurses' AC by 0.103 compared to Generation Y. However, there was no effect on the Boomer Generation or Generation X's AC compared to Generation Y.

PAL was used as the reference category for the LS comparisons. TFL compared to PAL resulted in an increase of 1.256 units in staff nurses' AC. TAL compared to PAL results in an increase of .447 units in staff nurses' AC. There was an increase in staff

nurses' AC for TFL and TAL when compared to PAL, however it was only statistically significant when TFL was compared to PAL ($p = 0.001$).

Table 11

Parameter Estimates for Affective Commitment

Dependent Variable: Affective Commitment

					95% Confidence Interval	
Parameter	B	*SE*	t	*P*	Lower Bound	Upper Bound
Intercept	3.768	.258	14.597	.001*	3.258	4.278
Boomer Generation	-.455	.249	-1.831	.069	-.946	.036
Generation X	-.103	.247	-.418	.676	-.592	.385
Generation Y	0[a]	.	.	.	.	.
TFL	1.256	.250	5.016	.001*	.761	1.751
TAL	.447	.294	1.522	.130	-.133	1.028
PAL	0[a]	.	.	.	.	.

Note. *The *p* value is significant at the 0.05 level.

Note. 0[a] - the parameter is set to zero because it is redundant.

Note. Transformational Leadership (TFL); Transactional Leadership (TAL); Passive-Avoidant Leadership (PAL).

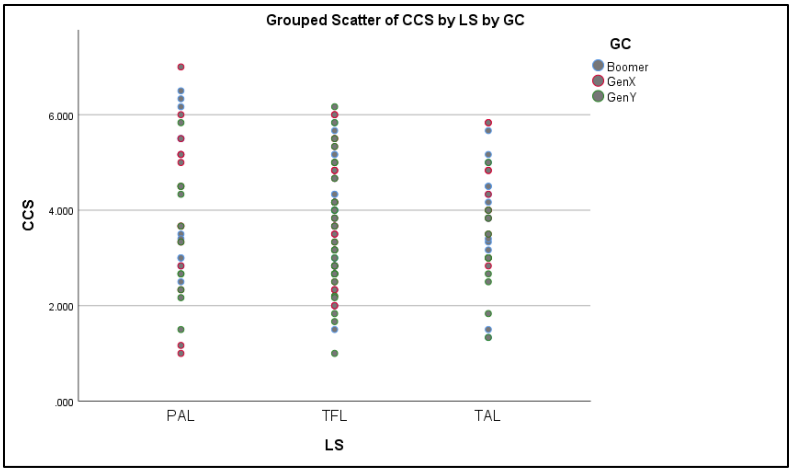
Main Effects Predictors of Continuance Commitment

Testing Underlying Assumptions

The assumption of normality of residuals for CC was met as evidenced by the skewness (.139) and kurtosis (-.576) being within +/- 1. The scatterplot showed the data pattern was linear, therefore the assumption of linearity was met (Figure 8). The presence of multivariate outliers was evaluated using Cook's Distance. There were no values of 1 or greater indicating the assumption of the absence of outliers was met. The *Levene's test* ($p = 0.120$) was not significant indicating there was homogeneity of variances and the assumption is met. The Breusch-Pagan test for Heteroskedasticity ($p = 0.235$) was not significant which indicates the assumption of homoskedasticity has been met. The collinearity diagnostics indicated that the assumption of multicollinearity has been met (VIF = 1.001).

Figure 8

Group Scatter of Continuance Commitment by Generational Cohort and Leadership Style



The descriptive statistics are provided in Table 12. The combined effects of GC and LS on staff nurses' CC was not significant [$F(4,155) = 1.886$, $p = 0.116$]. The model explained 2.2% (*R-squared* = 0.022) of the variability in staff nurses' CC. Likewise, LS (p =.521) and GC (p = 0.051) were not significant independent predictors of staff nurses' CC.

Table 12

Continuance Commitment Descriptive Statistics

Generational Cohort	Leadership Style	Mean Difference	SD	N
Boomer	TFL	3.68519	1.078474	27
Generation	TAL	3.84889	1.205666	15
	PAL	4.45000	1.538627	12
	Total	3.90062	1.240418	54
Generation X	TFL	3.84023	1.233217	29
	TAL	4.15278	1.026070	12
	PAL	4.02381	1.776938	14
	Total	3.95515	1.334231	55
Generation Y	TFL	3.50690	1.313767	29
	TAL	3.06061	1.020002	11
	PAL	3.40909	1.289624	11
	Total	3.38954	1.240618	51
Total	TFL	3.67725	1.208920	85
	TAL	3.71667	1.157992	38
	PAL	3.97928	1.580990	37
	Total	3.75646	1.290491	160

Note. Transformational Leadership (TFL); Transactional Leadership (TAL); Passive-Avoidant Leadership (PAL).

The parameter estimates were generated to determine the effect of each category of each independent variable on CC (see Table 13). Generation Y was used as the reference category for the GC comparisons. The influence of the Boomer generation when compared to Generation Y was to increase staff nurses' CC by .508 ($p = 0.043$) when compared to Generation Y. Likewise, the influence of Generation X when compared to Generation Y was to increase staff nurses' CC by .555 ($p = 0.027$). Both comparisons were statistically significant ($p < 0.05$).

PAL was used as the reference category for the LS comparisons. TFL compared to PAL results in a decrease of .278 in staff nurses' AC. TAL compared to PAL results in a decrease of .264 in staff nurses' CC. Despite the decrease in staff nurses' CC, the

results were not statistically significant ($p > 0.05$) for TFL compared to PAL, and TAL compared to PAL.

These results suggest that while the combined effects of GC and LS on CC are not statistically significant, both the Boomer Generation and Generation X contribute to higher levels of CC to a significantly greater extent than Generation Y.

Table 13

Parameter Estimates for Continuance Commitment

Dependent Variable: Continuance Commitment						
					95% Confidence Interval	
Parameter	B	*SE*	t	*P*	Lower Bound	Upper Bound
Intercept	3.604	.259	13.897	.001	3.092	4.117
Boomer	.508	.250	2.036	.043	.015	1.002
Generation X	.555	.248	2.234	.027	.064	1.045
Generation Y	0[a]	.	.	.	.	.
TFL	-.278	.252	-1.105	.271	-.775	.219
TAL	-.264	.295	-.893	.373	-.847	.320
PAL	0[a]	.	.	.	.	.

Note. *The *p* value is significant at the 0.05 level.

Note. 0[a] - the parameter is set to zero because it is redundant.

Note. Transformational Leadership (TFL); Transactional Leadership (TAL); Passive-Avoidant Leadership (PAL).

Main Effects Predictors of Normative Commitment

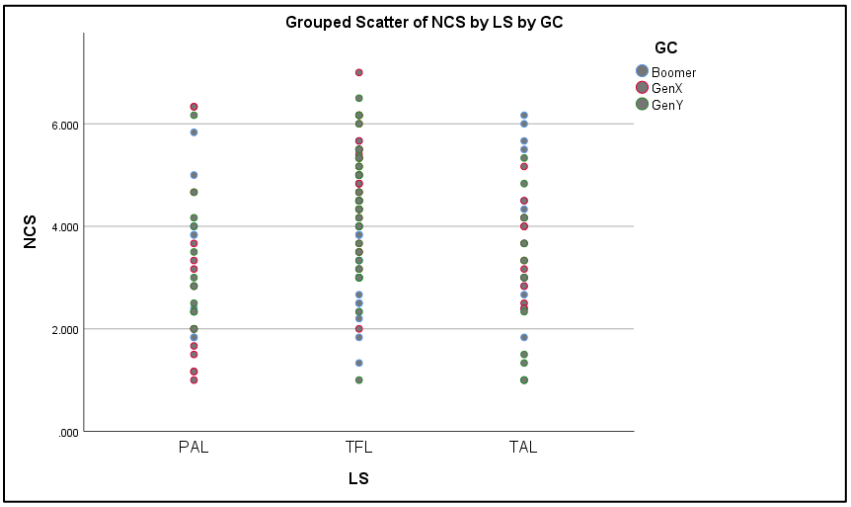
Testing Underlying Assumptions

The assumption of normality of residuals for NC was met as evidenced by the skewness (-.111) and kurtosis (-.735) being within +/- 1. The scatterplot showed the data pattern was linear, therefore the assumption of linearity was met (Figure 9). The presence of multivariate outliers was evaluated using Cook's Distance. There were no values of 1 or greater indicating the assumption of the absence of outliers was met. The *Levene's test* ($p = 0.068$) was not significant indicating there was homogeneity of variances and the assumption is met. The Breusch-Pagan test for Heteroskedasticity ($p = 0.415$) was not

significant which indicates the assumption has been met because there is heteroskedasticity. Based on the coefficients output, the collinearity statistic (VIF = 1.001) result is between 1 and 10; it can be concluded that there is no multicollinearity symptoms and the assumption of absence of multicollinearity has been met.

Figure 9

Grouped Scatter of Normative Commitment by Leadership Style and by Generational Cohort



The descriptive statistics are provided in Table 14. The results of the tests of between-subjects effects revealed the combined effects of GC and LS on staff nurses' NC is significant ($p < .001$) for the overall model [$F(4,155) = 6.234$, $p = 0.001$]. LS [$F(2,155) = 11.080$, $p = .001$] was a significant predictor of staff nurses' NC and GC was not significant ($p = .269$). The model explained approximately (*R-squared* = 0.116) 11.6% of the variability in NC.

Table 14

Normative Commitment Descriptive Statistics

Generational Cohort	Leadership Style	Mean Difference	SD	N
Boomer	TFL	3.680247	1.1667860	27
Generation	TAL	3.782222	1.5789723	15
	PAL	3.311111	1.3076568	12
	Total	3.626543	1.3085011	54
Generation X	TFL	4.801149	1.0358067	29
	TAL	3.561111	.8392918	12
	PAL	2.916667	1.8030719	14
	Total	4.050909	1.4736346	55
Generation Y	TFL	4.373563	1.2619706	29
	TAL	2.863636	1.5488673	11
	PAL	3.409091	1.2546882	11
	Total	3.839869	1.4498892	51
Total	TFL	4.299216	1.2336548	85
	TAL	3.446491	1.3971773	38
	PAL	3.190991	1.4772900	37
	Total	3.840417	1.4142748	160

Note. Transformational Leadership (TFL); Transactional Leadership (TAL); Passive-Avoidant Leadership (PAL).

The parameter estimates were generated to determine the effect of each category of each independent variable on NC (see Table 15). Generation Y was used as the reference category for the GC comparisons. The influence of the Boomer Generation when compared to Generation Y was to decrease staff nurses' NC by .154 ($p = 0.554$) when compared to Generation Y. The influence of Generation X when compared to Generation Y was to increase staff nurses' NC by .257 ($p = 0.323$). Despite the changes in NC, neither comparison was statistically significant ($p > 0.05$).

PAL was used as the reference category for the LS comparisons. TFL compared to PAL results in an increase of 1.117 ($p = 0.001$) in staff nurses' NC. TAL compared to PAL results in an increase of 0.282 ($p = 0.360$). in staff nurses' NC. Despite the changes

in staff nurses' NC, the results were only statistically significant when comparing TFL to PAL ($p = 0.001$).

It can be assumed that the combined effects of GC and LS are not predictors of staff nurses' NC. However, there is a statistically significant effect for LS, specifically the comparisons of TFL and PAL.

Table 15

Parameter Estimates for Normative Commitment

Dependent Variable: Normative Commitment

					95% Confidence Interval	
Parameter	B	SE	t	*P*	Lower Bound	Upper Bound
Intercept	3.144	.270	11.637	.001*	2.610	3.678
Boomer	-.154	.260	-.593	.554	-.668	.360
Generation X	.257	.259	.992	.323	-.254	.767
Generation Y	0[a]	-	-	-	-	-
TFL	1.117	.262	4.261	.001*	.599	1.634
TAL	.282	.308	.918	.360	-.325	.890
PAL	0[a]	-	-	-	-	-

Note. *The *p* value is significant at the 0.05 level. *Note*. 0[a] - the parameter is set to zero because it is redundant

Note. Transformational Leadership (TFL); Transactional Leadership (TAL); Passive-Avoidant Leadership (PAL).

Summary

Changes made from the initial plan were needed to ensure the sample size was met and the RQs could be answered. A one-way ANOVA was used to answer RQ1 and RQ2, and GLM main effects was used to answer RQ3. The data analysis using the one-way ANOVA revealed a statistically significant difference in staff nurses' affective commitment for leadership style but not for generational cohort. Similar findings were noted regarding the relationship of leadership style to normative commitment. The results

differed for continuance commitment in that there was no statistically significant difference for generational cohort or leadership style.

The combined effects of GC and LS on staff nurses' AC, CC, and NC was examined. Results revealed the combined effects of GC and LS were significant on affective commitment and normative commitment, however only LS was a significant independent predictor of staff nurses' AC and NC. The combined effects of GC or LS on CC were not statistically significant. Chapter 5 includes interpretations of findings, limitations of the study, and recommendations. In addition, implications for social change are discussed.

Chapter 5: Discussion, Recommendations, and Conclusions

The purpose of this descriptive cross-sectional study was to establish whether OC differs according to LS and GC individually, and explore the combined effects of GC and LS on staff nurses' OC. A review of literature revealed there were limited studies regarding the combined effects of GC and LS on staff nurses' OC. I used convenience sampling of staff nurses and members of professional nursing organizations in Northeastern U.S., nurses with a license to practice in Florida, and nationally through LinkedIn and snowball sampling. Potential participants received a recruitment letter that provided access to the consent form, followed by screening questions and then the survey. The survey included one demographic question and items included in the MLQ 5x-Short and revised TCM Employee Commitment Survey.

Findings suggest there are no differences in terms of staff nurses' OC by GC; however, there are differences in terms of staff nurses' AC and NC by LS. In addition, GC and LS have a combined effect on staff nurses' OC, though LS is a significant predictor and GC is not.

Interpretation of the Findings

This study's findings added to current literature regarding nurses' OC, specifically for staff nurses working in acute care settings. Findings from this study contribute new information regarding the combined effects of GC and LS on staff nurses' OC and added to current knowledge regarding AC, NC, and CC when compared to GC and LS.

Organizational Commitment and Generational Cohort

Two statistical tests, one-way ANOVA and GLM, were performed to answer the research questions. The findings of the one-way ANOVA revealed that GC had a global effect on CC however, no single GC had a significant effect on CC. Results may be due to errors resulting from confounding variables.

Findings are not consistent with the current literature. Jenna (2016) found Generation X has higher CC compared to Generation Y, and Generation Y has higher NC compared to Generation X. Similarly, Keepnews et al. (2010) and Stevanin et al. (2020) found Generation Y nurses reported greater OC compared to Generation X and the Boomer Generation. Likewise, Generation Y employees had greater AC when individual and organizational prosocial identity is high and linked to workplace culture (Stewart et al., 2017) and when the workplace is fun through teamwork (Civelek et al., 2017). In addition, Generation Y had lower levels of CC compared to Generation X (Glazer et al., 2019) and to the Boomer generation (Choi et al., 2020). The Boomer Generation have higher AC compared to Generation X and Generation Y (Stevanin et al., 2020), and Glazer et al. (2019) found no difference between Generation X and Y's AC and CC. The findings of the current study indicate that different GCs do not differ significantly on OC. This finding differs from those of prior studies which used different populations (Keepnews et al., 2010; Stewart et al., 2017) and were conducted in different settings and cultures (Choi et al., 2020; Stevanin et al., 2020) from those of the current study. Given the findings, perhaps GC is not as important among staff nurses who report being from the Boomer Generation, Generation X, and Generation Y GCs.

Findings for the GLM revealed GC was not a statistically significant predictor for AC, CC, or NC. The findings were consistent with those of Glazer et al. (2019) that found that GC, specifically Generation X and Y, were not predictors of AC, CC, or NC.

Despite varied results, findings of this study support current literature regarding GC and OC. In addition, it adds to the body of knowledge specific to staff nurses working in acute care settings.

Organizational Commitment and Leadership Style

Findings suggest LS is a predictor of staff nurses' AC and NC. Further, there is a statistically significant difference in LS group means for AC and NC. Given the findings, leadership style is an important contributor to OC among nurses.

Findings from the one-way ANOVA are consistent with studies that found a positive correlation between TAL and OC (Afshari & Gibson, 2016; Asiri et al., 2016; Sayadi, 2016) and TFL and OC (Abasilim et al., 2019; Afshari & Gibson, 2016; Jain & Duggal, 2016; Majid & Cohen, 2015; Surucu et al., 2020). OC is negatively correlated with PAL (Al-Yami et al., 2018). Choi et al. (2020) identified AC was positively correlated with both TFL and TAL, however the association with TFL was stronger when compared to TAL TFL and TAL positively impact nurses' OC, and there is a positive correlation between NC and TFL (Dashan et al., 2017; Vagharseyvedin, 2016). In addition, OC was positively correlated with TAL when mediated via organizational climate (Makhathini & Van Dyk, 2018).

The findings of the current study were not consistent with Asiri et al (2016) study of Saudi Arabian nurses that found a negative correlation between TFL and OC. Similar

findings were found by Abasilim et al. (2019) that revealed a negative relationship between OC and TAL and a positive relationship between OC and PAL for Nigeran civil service employees. The findings contradict the work of Al-Yami et al. (2018) who identified a negative correlation between OC and PAL. The differences in the findings of these studies and the current study may be related to differences in culture (Abasilim et al., 2019; Al-Yami et al., 2018; Asiri et al., 2016) or type of participant (Abasilim et al., 2019).

The findings of this study for GLM revealed consistency with Asiri et al. (2016) study that identified TAL is a predictor of Saudi Arabian nurses' OC. In contrast, Asiri et al. (2016) study revealed PAL was a predictor of OC. Makhathini and Van Dyk (2018) identified that LS was not a predictor of OC, however, the study was conducted with South African soldiers, which may have contributed to the inconsistency of their findings with those of this study. The findings of this study may be different due to culture (Asiri et al., 2016; Makhathini & Van Dyk, 2018) and type of participants (Makhathini & Van Dyk, 2018).

Despite varied results, findings of this study support current literature on LS and OC. In addition, it adds to the body of knowledge specific to staff nurses working in acute care settings.

Theoretical Framework

The TLT and GT were the theoretical frameworks for this study. No studies were identified that used both frameworks to study the effects of GC and LS on staff nurses'

OC; therefore, the this study is unique in that it expands literature regarding the effects of GC and LS on nurses' OC.

Transformational Leadership Theory

The underlying assumption of the TLT is that transformational leaders motivate, empower, and develop followers (Cote, 2017; Fischer, 2016) to move beyond their own self-interest and focus on needs and goals of the organization (Bass, 1999; Siangchokyoo et al., 2020). Transformational leaders promote attachments to organizations (Barbinata et al., 2017) and encourage challenging the status quo (Bass, 1985; Bass, 1990) by using idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass & Avolio, 1993).

Results of this study supported the proposition that the TFL is a preferred leadership style among nurses. Specifically, the TFL is a preferred leadership style for staff nurses across generations (Boomer Generation, Generation X, Generation Y) in terms of AC and NC, and LS is a predictor of staff nurses' OC.

Generational Theory

The GT is a predictive model that involves how each generation changes and transforms a community, state, or nation by explaining generational differences (LifeCourse Associates, 2020b). Each generation has similar values, beliefs, communication styles, cultures, and attitudes (Howe & Strauss, 2007) and each generation will experience historical turnings (high, awakening, unraveling, and crisis) throughout the lifespan (childhood, young adult, midlife, and elderhood) (LifeCourse, 2020b).

Findings of this study did not support the propositions of generational differences. Specifically, there are no differences in staff nurses OC by GC and GC was not found to be a predictor of staff nurses' OC. The findings expand the theory when it comes to matters of OC and staff nurses.

The review of the literature revealed no studies that included TLT or GT as the framework to study the collective effects of GC and LS on staff nurses' OC within the current nursing workforce within the past five years and beyond. Despite the varied results in the literature, this study provides new information on use of TLT and GT to study the differences and combined effects of LS and GC on nurses' organizational commitment.

Limitations of the Study

There are limitations to this study. First, the use of a questionnaire had the potential to promote social desirability bias. To minimize bias, the recruitment letters included language that results would be presented in the aggregate and all responses were confidential. The second limitation was the design of the study. The cross-sectional design was selected as the intent was to look at one point in time, however it limited the ability to determine cause and effect, an inherent threat to internal validity. The third limitation was not being able to include the five generations (Silent Generation, Boomer Generation, Generation X, Generation Y, Generation Z) in the current workforce. There were not enough participants for the Silent Generation and Generation Z to include in the data analysis which was a threat to external validity. A fourth limitation was the response rate. Despite recruitment from two hospitals, four nursing organizations, the Florida

Health Portal, LinkedIn, and by snowball sampling, the response rate was only 0.57% which is a factor in sampling bias. The last limitation is the sample. The results were for acute care staff nurses and may not be generalizable to other groups of nurses.

Recommendations

In this study, I focused on staff nurses working in the acute care setting in select hospitals, nursing organizations, on LinkedIn, and licensed to practice nursing in the State of Florida. However, there was limited responses from the Silent Generation and Generation Z that resulted in dropping their responses from the data analysis. Further studies are needed that include the five generations (Silent Generation, Boomer Generation, Generation X, Generation Y, and Generation Z) that make up the current nursing workforce. The results may provide new information about the two least studied generations that could be used by healthcare leaders to enhance staff nurses' commitment to the organization. Future researchers may want to consider other methods to recruit the Silent Generation and Generation Z, such as providing a paper version of the survey for the Silent Generation, and other means of social media for Generation Z.

Future studies should be conducted that control for possible confounders that might influence the relationship between GC, LS, and OC. It may be helpful for a study of this kind to be undertaken by national nursing organizations that may have the ability to access a larger participant pool of nurses across the five generations. Moreover, repeating this study on an international level would also assist in determining if the results are consistent across cultures.

Implications for Positive Social Change

The results of the study will promote positive social change by providing information that healthcare leaders can use to promote OC. Nurses who are committed to the organization have greater job satisfaction (Kim et al., 2018) and exhibit more caring behaviors (Naghneh et al., 2017) which promotes patient satisfaction (Murale et al., 2015), and tend to remain with the organization (Church et al., 2018) supporting retention of a clinically competent workforce (Bowles et al., 2018; Feeley, 2017).

There is an impending shortage of nurses, the exodus from the profession has doubled from 40,000 per year in 2010 to 80,000 in 2020 (Auerbach et al., 2015) and is expected to increase from the projections due to COVID-19 (Catton, 2021; Turale & Nantsupaway, 2021). Dols et al. (2019) identified the average number of years a nurse remains in a position is highest with the Boomer Generation (8.25 years), followed by Generation X (5.83 years), and is lowest with Generation Ys (3.03 years). Based on the findings of this study and the statistics presented, it is imperative for healthcare leaders to use strategies that will promote OC and increase the average number of years for all generations, but most specifically with Generation X and Y as they make up the largest groups in the current workforce.

Strategies should include formal recruitment and retention programs that focus on the unique needs of each generation. Specifically, the leaders can foster affective commitment for Generation Y and the Boomer Generation nurses by promoting loyalty and engagement (Koppel et al., 2017), providing opportunities for growth and a positive work environment (Anselmo-Witzel et al., 2017). Generation X nurses are motivated by

normative commitment which may be promoted by fostering teamwork, providing clear goals and expectations, using open communication, and encouraging innovation. Healthcare organizations need to train managers to enhance their transformational and transactional leadership skills to promote affective (Boomer Generation and Generation Y) and normative (Generation X) commitment. Using these strategies may provide organizations with the ability to leverage the advantage of retaining a clinical competent, multi-generational workforce.

Based on the findings, healthcare organizations need to train managers to enhance their transformational and transactional leadership skills to promote affective (Boomer Generation and Generation Y) and normative (Generation X). Organizations may be able to leverage the advantage of retaining a clinical competent, multi-generational workforce by fostering an environment that promotes transformational and transactional leadership skills.

Conclusions

I investigated whether OC differed according to LS and GC individually, and then explored the combined effects of GC and LS on staff nurses' OC. Results of this study show OC does differ in terms of leadership style but not GC. In addition, LS is a predictor of staff nurses' OC, whereas GC is not. Results suggest that the transformational and transactional leadership styles may promote staff nurses' AC and NC. Results are generalizable to healthcare systems providing acute care services. Overall, findings suggest that healthcare leaders in acute care settings can enhance staff nurses' AC and NC by using transformational and transactional leadership styles. This

may increase job satisfaction, reduce the intent to leave an organization, assist in the retention of a clinically competent workforce, and improve patient satisfaction.

References

Abasilim, U. D., Gberevbie, D. E., & Osibanjo, O. A. (2019). Leadership styles and employees' commitment: Empirical evidence from Nigeria. *Sage Open, 9*(3), 1-15. https://doi.org/10.1177/2158244019866287

Afshari, L., & Gibson, P. (2016). How to increase organizational commitment through transactional leadership. *Leadership & Organization Development Journal, 37*(4), 507-519. www.emeraldinsight.com/0143-7739.htm

Agrawal, S. (2017). Personality traits and organizational commitment of Gen X and Gen Y employees. *Journal of Organization and Human Behaviour, 6*(1-2), 10-17. https://www.researchgate.net/publication/342719895_Personality_Trait_and_Organizational_Commitment_of_Gen_X_and_Gen_Y_Employees

Allen, G. P., Moore, W. M., Moser, L. R., Neill, K. K, Sambamoorthi, U., & Bell, H. S. (2016). The role of servant leadership and transformational leadership in academic pharmacy. *American Journal of Pharmaceutical Education, 80*(7), 113. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5066916/

Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology, 63*, 1-18. https://doi.org/10.1111/j.2044-8325.1990.tb00506.x

Allen, N. J., & Meyer, J. P. (1996). Affective, continuance, and normative commitment to the organization: An examination of construct validity. *Journal of Vocational Behavior, 49*, 252-276. https://doi.org/10.1006/jvbe.1996.0043

Alloubani, A., Akhu-Caheya, L., Abdelhafiz, I. M., & Almatari, M. (2019). Leadership styles' influence on the quality of nursing care. *International Journal of Health Care Quality Assurance, 32*(6), 1022-1033. https://doi.org/10.1108/IJHCQA-06-2018-0138

Al-Yami, M., Galdas, P., & Watson, R. (2018). Leadership style and organizational commitment among nursing staff in Saudi Arabia. *Journal of Nursing Management, 26*, 531-539. https://onlinelibrary.wiley.com/doi/pdf/10.1111/jonm.12578

American Association of Colleges of Nursing. (2020). *Fact sheet: Nursing shortage*. https://www.aacnnursing.org/Portals/42/News/Factsheets/Faculty-Shortage-Factsheet.pdf

Anselmo-Witzel, S., Orshan, S., Heitner, K., & Bachhand, J. (2017). Are generation Y nurses satisfied on the job? Understanding their lived experiences. *Journal of Nursing Administration, 47*(4), 232-237. https://doi.org/10.1097/NNA.0000000000000470

Asiri, S. A., Rohrer, W. W., Al-Surimi, K., Da'ar, O. O., & Ahmed, A. (2016). The association of leadership styles and empowerment with nurses' organizational commitment in an acute health care setting: A cross-sectional study. *BMC Nursing, 15*, 38. https://doi.org/10.1186/s12912-016-0161-7

Auerbach, D. I., Buerhaus, P. I., & Staiger, D. O. (2015). Will the RN workforce weather the retirement of the Baby Boomers? *Medical Care, 53*(10), 850. https://doi.org/10.1097/MLR0000000000000415

Avolio, B. J., & Bass, B. M. (2004). *Multifactor leadership questionnaire™: Manual and sample set* (3rd ed.). Mind Garden.

Barbinta, A., Dan, S., & Muresan, C. (2017). Bernard Bass – Founder of the transformational leadership theory. *Revista de Management şi Inginerie Economică, 16*(4), 758-762. http://www.rmee.org/abstracturi/66/22_Personalitati_Bernard%20Bass.pdf

Bashir, M. A., Haider, S., & Akhtar, M. H. (2019). Mediating effect of employee self-determination on the relationship between transformational leadership and organizational commitment. *Pakistan Journal of Social Sciences, 39*(4), 1795-1810. https://www.researchgate.net/publication/351370909_Mediating_Effect_of_Employee_Self-Determination_on_the_Relationship_between_Transformational_Leadership_and_Organizational_Commitment_Sajid_Haider

Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics, 18*(3), 19-31. https://doi.org/10.1016/0090-2616(90)90061-S

Bass, B.M. & Avolio, B.J. (1993). Transformational leadership and organizational culture. *Public Administration Quarterly, Spring*, 112-121. https://www.jstor.org/stable/40862298

Bass, B. M. (1985). *Leadership and performance beyond expectations*. Free Press.

Bass, B. M. (1999). Two decades of research and development in transformational leadership. *European Journal of Work and Organizational Psychology*, *8*(1), 9-32. https://doi.org/10.1080/135943299398410

Bass, B. M., Jung, D. I., Avolio, B. J., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, *88*(2), 207-218. https://doi.org/10.1037/0021-9010.88.2.207

Bass, B, & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership behavior. *Leadership Quarterly 10*(2): 181–217. https://doi.org/10.1016/S1048-9843(99)00016-8

Beecroft, P. C., Dorey, F., & Wenten, M. (2008). Turnover intention in new graduate nurses: A multivariate analysis. *Journal of Advanced Nursing*, *62*(1), 41-52. https://doi.org/10.1111/j.1365-2648.2007.04570.x

Benson, J., Brown, M., Glennie, M., O'Connell, M., & O'Keefe, P. (2018). The generational "exchange" rate: How generations convert career development satisfaction into organisational commitment or neglect of work. *Human Resource Management Journal*, *28*(4),524-539. https://doi.org/10.1111/1748-8583.12198

Boamah, S., Laschinger, H. K. S., Wong, C., & Clarke, S. (2018). Effect of transformational leadership on job satisfaction and patient safety outcomes. *Nursing Outlook, 66(2), 180-189.* https://doi.org/10.1016/j.outlook.2017.10.004

Boamah, S. A., & Tremblay, P. (2019). Examining the factor structure of the MLQ transactional and transformational leadership dimensions in nursing context.

Western Journal of Nursing Research, 41(5), 743-761. https://doi.org/10.1177/0193945918778833

Bowles, J. R., Batcheller, J., & Pappas, S. (2018). The role of the nurse leader in advancing the quadruple aim. *Nurse Leader, 16*(4), 244-248. https://doi.org/10.1016/j.mnl.2018.05.011

Bray, N. J., & Williams, L. (2017). A quantitative study on organizational commitment and communication satisfaction of professional staff at a master's institution in the United States. *Journal of Higher Education Policy and Management, 39*(5), 487-502. https://doi.org/10.1080/1360080X.2017.1354757

Buerhaus, P., Auerbach, D., & Staiger, D. (2017a, May 3). *How should we prepare for the wave of retiring baby boomer nurses?* Health Affairs Blog. https://www.healthaffairs.org/do/10.1377/hblog20170503.059894/full/

Buerhaus, P. I., Skinner, L. E., Auerbach, D. I., & Staiger, D. O. (2017b). Four challenges facing the nursing workforce in the United States. *Journal of Nursing Regulation, 7*(17), 40-46. http://healthworkforcestudies.com/images/JNR0717_40-46_Buerhaus.pdf

Buerhaus, P. I., Skinner, L. E., Auerbach, D. I., & Staiger, D. O. (2017c). State of the registered nurse workforce as a new era of health reform emerges. *Nursing Economic$, 35*(5), 229-237. http://healthworkforcestudies.com/images/JNR0717_40-46_Buerhaus.pdf

Burns, J.M. (1978). *Leadership*. Harper & Row.

Bycio, P., Hackett, R., & Allen, J. (1995). Further assessments of Bass's (1985) conceptualization of transactional and transformational leadership. *Journal of Applied Psychology, 80*, 468-478. http://dx.doi.org/10.1037/0021-9010.80.4.468

Cao, X., Chen, L., Tian, L., Diao, Y., & Hu, X. (2015). Effect of professional self-concept on burnout among community health nurses in Chengdu, China: The mediator role of organisational commitment. *Journal of Clinical Nursing, 24*(19-20), 2907-2915. https://doi.org/10.1111/jocn.12915

Carver, L., & Candela, L. (2008). Attaining organizational commitment across different generations of nurses. *Journal of Nursing Management, 16*(8), 984-991. https://doi.org/10.1111/j.1365-2834.2008.00911.x

Carver, L., Candela, L., & Gutierrez, A. P. (2011). Survey of generational aspects of nurse faculty organizational commitment. *Nursing Outlook, 59*(3), 137-148. https://doi.org/10.1016/j.outlook.2011.01.004

Catton, H. (2021). COVID-19: The future of nursing will determine the fate of our health services. *International Nursing Review, 68*(1), 9-11. https://pubmed.ncbi.nlm.nih.gov/33891771/

Chai, D. S., Hwang, S. J., & Joo, B. (2017). Transformational leadership and organizational commitment in teams: The mediating roles of shared vision and team-goal commitment. *Performance Improvement Quarterly, 30*(2), 137-158. https://doi.org/10.1002/piq.21244

Cheah, C.S., Chong, V. S. W., Yeo, S. F., & Pee, K. W. (2016). An empirical study on factors affecting organizational commitment among generation X. *Procedia –*

Social and Behavioral Sciences, 219(31)167-174. https://doi.org/10.1016/j.sbspro.2016.05.002

Chen, S., Wu, W., Chang, C., Lin, C., Jung, J., Weng, H., Lin, Y., & Lee, S. (2015). Organizational justice, trust, and identification and their effects on organizational commitment in hospital nursing staff. *BMC Health Services Research, 15,* 363. doi:10.1186/s12913-015-1016-8

Choi, D., Lee K., & Hur, H. (2020). Social enterprises' social orientation: The impact on the organizational commitment of employees. *Journal of Public and Nonprofit Affairs, 6*(1), 44-62. https://doi.org/10.20899/jpna.6.1.44-62

Christopher, S.A., Fethney, J., Chiarella, M., & Waters, D. (2018). Factors influencing turnover in GenX nurses: Results of an Australian survey. *Collegian, 25*(2), 217-225. https://doi.org/10.1016/j.colegn.2017.06.003

Church, C. D., He, Z., & Yarbrough, S. (2018). Factors influencing organizational commitment and turnover in nurse residents. *The Journal of Continuing Education in Nursing, 49*(10), 482-488. https://doi.org/10.3928/00220124-20180918-09

Civelek, M. E., Cemberci, M., Asci, M. S., Oz, S. (2017). The effect of the unique features of Y generation on organizational commitment. *Journal of History Culture and Art Research, 6*(6), 336-359. http://dx.doi.org/10.7596/taksad.v6i6.1353

Clark, C. M., & Kenski, D. (2017). Promoting civility in the OR: An ethical imperative. *AORN Journal, 105*(1), 60-66). https://doi.org/10.1016/j.aorn.2016.10.019

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*(1), 155. http://www.ime.usp.br/~abe/lista/pdfn45sGokvRe.pdf

Cook, R. D. (1977). Detection of influential observation in linear regression. *Technometrics, 19*(1), 15-18. https://doi.org/10.2307/1268249

Cote, R. (2017). Vision of effective leadership. *Journal of Leadership, Accountability and Ethics, 14*(4), 52-63. https://doi.org/10.5430/ijba.v8n6p1

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods (5th ed.).* Sage.

Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin, 52*(4), 281-302. https://doi.org/10.1037/h0040957

da Silva, R. C. D., Dutra, J. S. Veloso, E. F. R., Fischer, A. L., & Trevisan, L. N. (2015). Generational perceptions and their influences on organizational commitment. *The Journal of the Iberoamerian Academy of Management: Armonk, 13*(1), 5-30. https://doi.org/10.1188/MRJIAM-12-2013-0537

Dahshan, M. E. A. E., Youssef, H. A. M., Aljouaid, M., Babkeir, R. A., & Hassan, W. B. (2017). Effect of nurse managers' leadership style on organizational commitment of nurses working at Taif governmental hospitals in Kingdom of Saudi Arabi. *IOSR Journal of Nursing and Health Sciences, 6*(2), 35-46. https://doi.org/10.9790/1959-0602043546

Deng, X. (2018). Embedding 'familiness' in HRM practices to retain a new generation of migrant workers in China. *Asia Pacific Business Review, 24*(4), 561-577. https://doi.org/10.1080/13602381.2018.1451124

Dimitrov, D. Y., & Darova, S. S. (2016). Factor structure of the multifactor leadership questionnaire MLQ 5x. *Strategic Impact, 1*, 44-56. https://www.researchgate.net/publication/324220801_FACTOR_STRUCTURE_OF_THE_MULTIFACTOR_LEADERSHIP_QUESTIONNAIRE_MLQ_5X

Dimock, M. (2019, January 17). Defining generations: Where millennials end and generation Z begins. *Pew Research Center*. Retrieved from https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/

Dinc, M. S., & Huric, A. (2017). The impact of ethical climate types on nurses' behaviors in Bosnia and Herzegovina. *Nursing Ethics, 24*(8), 922-935. https://doi-org./10.1177/0969733016638143

Dols, J. D., Chargualaf, K. A., & Martinez, K. S. (2019). Cultural and generational considerations in RN retention. *The Journal of Nursing Administration, 49*(4), 201-207. doi:10.1097/NNA.0000000000000738

Dong, Y., & Peng, C. Y. (2013). Principled missing data methods for researchers. *SpringerPlus*, *2*(1), 222. https://doi.org/10.1186/2193-1801-2-222

Dunham, R. B., Grube J. A., & Castaneda, M. B. (1994. Organizational commitment: The utility of an integrative definition. *Journal of Applied Psychology, 79*(3), 370-380. http://dx.doi.org/10.1037/0021-9010.79.3.370

Ennis, M. C., Gong, T., & Okpozo, A. Z. (2018). Examining the mediating roles of affective and normative commitment in the relationship between transformational leadership practices and turnover intention of government employees.

International Journal of Public Administration, 41(3), 203-215. https://doi.org/10.1080/01900692.2016.1256894

Fawcett, J., & Garity, J. (2009). Chapter 6: Evaluation of middle-range theories. In: *Evaluating research for evidence-based nursing,* 73-88. F.A. Davis.

Feeley, D. (2017, November 28). The triple aim or the quadruple aim? Four points to help set your strategy. *Institute for Healthcare Improvement*. http://www.ihi.org/communities/blogs/the-triple-aim-or-the-quadruple-aim-four-points-to-help-set-your-strategy

Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Sage.

Fischer, S. (2016). Transformational leadership in nursing: A concept analysis. *Journal of Advanced Nursing, 72(11),* 1-18. https://doi/full/10.1111/jan.13049

Fisher, R. J. (1993). Social desirability bias and the validity of indirect questioning. *Journal of Consumer Research, 20*(2), 303-315. https://doi.org/10.1086/209351

Flemming, P. L. (2017). Building a climate of change with a link through transformational leadership and corporate culture: A management key to a global environment. *International Journal of Business and Social Research, 7*(1), 44-55. https://doaj.org/article/ff82823771e54306ad44afbd2ba87240

Fry, R. (2018, April 11). Millennials are the largest generation in the U.S. Labor force. *Pew Research Center*. https://www.pewresearch.org/fact-tank/2018/04/11/millennials-largest-generation-us-labor-force/

Gao Q., Ahn, M., & Zhu, H. (2015). Cook's distance measures for varying coefficient models with functional responses. *Technometrics, 57*(2), 268-280. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4524573/

Gholami, M., Saki, M., & Pour, A. H. H. (2019). Nurses' perception of empowerment and its relationship with organizational commitment and trust in teaching hospitals in Iran. *Journal of Nursing Management, 27*(5), 1020-1029. https://doi.org/10.1111/jonm.12766

Glazer, S., Mahoney, A. C., & Randall, Y. (2019). Employee development's role in organizational commitment: A preliminary investigation comparing generation X and millennial employees. *Industrial and Commercial Training, 51*(1), 1-12. https://doi.org/10.1108/ICT-07-2018-0061

Gray, J. R., Grove, S. K., & Sutherland, S. (2017). *Burns and Grove's: The practice of nursing research: Appraisal, synthesis, and generation of evidence* (8th ed.). Elsevier.

Groves, K. S. (2020). Testing a moderated mediation model of transformational leadership, values, and organization change. *Journal of Leadership & Organizational Studies, 27*(1), 35-48. https://doi.org/10.1177/1548051816662614

Gupta, V., Agarwal, U. A., & Khatri, N. (2016). The relationships between perceived organizational support, affective commitment, psychological contract breach, organizational citizenship behaviour and work engagement. *Journal of Advanced Nursing*, *72*(11), 2806-2817. https://doi.org/10.1111/jan.13043

Haddad, L. M., Annamaraju, P., Toney-Butler, T. J. (2020, March 29). Nursing shortage. *NCBI – Stat Pearls*. https://www.ncbi.nlm.nih.gov/books/NBK493175/

Hampton, D., & Welsh, D. (2019). Work values of generation Z nurses. *Journal of Nursing Administration, 49*(10), 480-486. https://doi.org/10.1097/NNA.000000000000079

Harris, J., & Mayo, P. (2018). Taking a case study approach to assessing alternative leadership models in healthcare. *British Journal of Nursing, 27*(10), 608-613. https://doi.org/10.12968/bjon.2018.27.11.608

Heinrich Heine Universitat Dusseldorf (2020, March 17). G*Power: Statistical Analyses for Windows and MAC. https://www.psychologie.hhu.de/arbeitsgruppen/allgemeine-psychologie-und-arbeitspsychologie/gpower.html

Herscovitch, L., & Meyer, J. P. (2002). Commitment to organizational change: Extension of a three-component model. *Journal of Applied Psychology, 87*(3), 474-487. https://doi.org.10.1037//0021-9010.87.3.47

Hersey P., & Blanchard, K. (1977). *Management of organizational behavior: Utilizing human resources* (4th ed.). Prentice Hall.

Hisel, M. E. (2020). Measuring work engagement in a multigenerational nursing workforce. *Journal of Nursing Management, 28*(2), 294-305. https://doi.org/10.1111/jonm.12921

Ho, J. (2016). Influence of organizational context and follower's deposition on the effectiveness of transformational leadership. *International Journal of*

Organization Theory and Behavior, *19*(3), 308-343. https://doi.org/10.1108/IJOTB-19-03-2016-B002

Howe, N., & Strauss, W. (2007). The next 20 years: How customer and workforce attitudes will evolve. *Harvard Business Review, July-August*., 41-52. http://download.2164.net/PDF-newsletters/next20years.pdf

Hsieh, S., Chiu, H., Hsieh, Y., Ho, P., Chen, L., & Chang, W. (2019). The perceptions and expectations toward the social responsibility of hospitals and organizational commitment of nursing staff. *The Journal of Nursing Research*, *24*(3), 249-260. https://doi.org/10.1097/jnr.0000000000000133

Huber, P., & Schubert, H. (2019). Attitudes about work engagement of different generations – A cross-sectional study with nurses and supervisors. *Journal of Nursing Management, 27*, 1341-1350. https://doi.org/10.1111/jonm.12805

Ibrahim, A. (2020). Psychological empowerment and organizational commitment among employees in the lodging industry. *Journal of Human Resources in Hospitability and Tourism, 19*(3), 227-295. https://www.tandfonline.com/doi/abs/10.1080/15332845.2020.1737766

Ilhan, U. D., Guler, B. K., & Aksarayli, M. (2019). Work values and affective organizational commitment: A study on Gen X and Gen Y blue-collar workers. *Journal of Yasar University*, *14*(56), 379-406.

Im, S. B., Cho, M., Kim, S. Y., & Heo, M. L. (2016). The huddling programme: Effects on empowerment, organizational commitment and ego-resilience in clinical

nurses – a randomized trial. *Journal of Clinical Nursing, 25*(9-10), 1377-1387. https://doi.org/10.1111/jocn.13228

Introduction to regression with SPSS lesson 3: SPSS regression with categorical predictors. (n. d.). UCLA: Statistical Consulting Group. https://stats.idre.ucla.edu/spss/seminars/introduction-to-regression-with-spss/introreg-lesson3/#top

Jacox, A. (1974). Theory construction in nursing: An overview. *Nursing Research, 23*, 4-13. http://dx.doi.org/10.1097/00006199-197401000-00003

Jain, P., & Duggal, T. (2016). The influence of transformational leadership and emotional intelligence on organizational commitment. *Journal of Commerce & Management Thought, 7*(3), 586-598. https://doi.org/10.5958/0976-478X.2016.000331

Jain, P., & Duggal, T. (2018). Transformational leadership, organizational commitment, emotional intelligence, and job autonomy. *Management Research Review: MRN: Patrington, 41*(9), 1033-1046. https://doi.org/10.1108/MRR-01-2018-0029

Jenna, R. K. (2016). Effect of generation gap on organizational commitment: A case study of Ferro-alloy Industries in India. *Global Business Review, 17*(3 suppl), 76S-89S. https://doi.org/10.1177/0972150916631085

Jones, A. (2015). Organisational commitment in nurses: Is it dependent on age or education? *Nursing Management, 21*(9), 29-36. https://doi.org/10.7748/nm.21.9.29.e1298

Karim, N. H. A., & Noor, N. H. N. M. (2006). Evaluating the psychometric properties of Allan and Meyer's organizational commitment scale: A cross-cultural application

among Malaysian academic librarians. *Malaysian Journal of Library and Information Science, 11*(1), 89-101. https://mjlis.um.edu.my/article/view/7825

Keepnews, D.M., Brewer, C. S., Kovner, C. T., and Shin, J. H. (2010). Generational differences among newly licensed registered nurses. *Nursing Outlook, 58*(3), 155-163. https://doi.org/10.1016/joutlook.2009.11.001

Keller, T., & Weibler, J. (2015). What it takes and costs to be an ambidextrous manager: Linking leadership and cognitive strain to balancing exploration and exploitation. Journal of Leadership & Organizational Studies, 22(1), 54-71. https://doi.org/10.1177/1548051814524598

Khali, U., Iqbal, J., & Khan, A. (2016). Exploring leadership styles of school administrators in Pakistan. *Journal of Social Sciences, 10*(1), 39-47.

Khodadadei, N., Rezaei, B., & Salehi, S. (2016). Investigating the relationship of organizational commitment and clinical competence - Case study: Nurses working in Montazeri Hospital, city of Najafabad, Iran, 2015. *International Journal of Medical Research & Health Sciences, 5*(5S), 308-316. https://core.ac.uk/download/pdf/227000571.pdf

Kim, M., Choi, L., Borchgrevink, C. P., Knutson, B., & Cha, J. (2018). Effects of Gen Y hotel employee's voice and team-member exchange on satisfaction and affective commitment between the U.S. and China. *International Journal of Contemporary Hospitality Management, 30*(5), 2230-2248. https://www.emerald.com/insight/content/doi/10.1108/IJCHM-12-2016-0653/full/html

Kim, S., & Shin, M. (2019). Transformational leadership behaviors, the empowering process, and organizational commitment: investigating the moderating role of organizational structure in Korea. *The International Journal of Human Resource Management, 30*(2), 251-275. https://doi.org/10.1080/09585192.2016.1278253

Koppel, J., Deline, M., & Virkstis, K. (2017). The case for focusing on Millennial retention. *Journal of Nursing Administration, 47*(7/8), 361-363. https://doi.org/10.1097/NNA.0000000000000495

Kueenzi, S. (2019). Perceived leadership behaviours and their effects on IT departments in Swiss financial companies. *Journal of Management Development, 38*(6), 484-500. http://www.emeraldinsight.com.ezp.waldenulibrary.org/doi/10.1108/JMD-03-2019-0086

Labrague, L. J., McEnroe-Petitte, D. M., & Tsaras, K. (2019). Predictors and outcomes of nurse professional autonomy: A cross-sectional study. *International Journal of Nursing Practice*, 25(1), e12711. https://doi.org/10.1111/ijn.12711

Leach, L. S. (2005). Nurse executive transformational leadership and organizational commitment. *Journal of Nursing Administration, 35*(5), 228-237. https://doi.org/10.1097/00005110-200505000-00006

Lee, K., Allen, N. J., Meyer, J. P., & Rhee, K. (2001). The three-component model of organizational commitment: An application to South Korea. *Applied Psychology: An International Review, 50*(4), 598-614. https://iaap-journals.onlinelibrary.wiley.com/journal/14640597

Lee, T. W., & Mowday, R. T. (1987). Voluntarily leaving an organization: An empirical investigation of Steers and Mowday's model of turnover. *Academy of Management Journal, 30*(4), 721-743. https://doi.org/10.2307/256157

Levine, K. J., Carmody, J., & Silk, K. J. (2019). The influence of organizational culture, climate and commitment on speaking up about medical errors. *Journal of Nursing Management, 28*(1), 130-138. https://doi.org/10.1111/jonm.12906

LifeCourse Associates. (2020a). *History.* https://www.lifecourse.com/about/history.html

LifeCourse Associates. (n. d.) *Turnings in history.* https://www.lifecourse.com/assets/files/turnings_in_history(1).pdf

LifeCourse Associates. (2020b). *The LifeCourse method: Introduction.* https://www.lifecourse.com/about/method/insight-overview.html

LifeCourse Associates. (2020c). *Turnings: Introduction.* https://www.lifecourse.com/about/method/turnings-introduction.html

LifeCourse Associates. (2020d). *What is a generation*. https://www.lifecourse.com/about/method/phases.html

Lin, C., & Chang, C. (2015). Job satisfaction of nurses and its moderating effects on the relationship between organizational commitment and organizational citizenship behaviors. *Research and Theory for Nursing Practice, 29*(3), 226-244. https://doi.org/10.1891/1541-6577.29.3.226

Long, C. S., Yong, L. Z., Chuen, T. W. (2016). Analysis of the relationship between leadership styles and affective organizational commitment. *International Journal*

of Management, Accounting and Economics, 3(10), 572-598. https://doi.org/10.3926/ic.476

Makhathini, T. N., & Van Dyk, G. A. J. (2018). Organisational climate, job satisfaction, and leadership style influences on organizational commitment amount South African soldiers. *Journal of Psychology in Africa, 28*(1), 21-25. https://doi.org/10.1080/14330237.2018.1438834

Majid, A. E. E., & Cohen, A. (2015). The role of values and leadership style in developing OCB among Arab teachers in Israel. *Leadership & Organization Development Journal; Bradford, 36*(3), 308-327. https://doi.org/10.1108/LODJ-06-2013-0077

Mazurenko, O., Gupte, G., & Shan, G. (2015). Analyzing U.S. nurse turnover: Are nurses leaving their jobs or the profession itself. *Journal of Hospital Administration, 4*(4), 48-56. https://doi.org/10.5430/jha.v4n4p48

Mertler, C. A., & Reinhart, R. V. (2017). *Advanced and multivariate statistical methods: Practical application and interpretation* (6th ed.). Taylor & Francis.

Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review, 1*(1), 61-89. https://doi.org/10.1016/1053-4822(91)90011-Z

Meyer, J. P., & Allen, N. J. (2004). *TCM employee commitment survey academic users guide 2004*. University of Western Ontario.

Meyer, J. P., Allen, N. J., & Gellatly, I. R. (1990). Affective and continuance commitment to the organization: Evaluation of measures and analysis of

concurrent and time-lagged relations. *Journal of Applied Psychology, 7*(6), 710-720. https://www.Apa.org/pubs/journals/apl

Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations. Extension and test of a three-component conceptualization. *Journal of Applied Psychology, 78*(4), 538-551. https://www.Apa.org/pubs/journals/apl

Merton, R.K. (1968). On sociological theories of the middle range: In *Social Theory and Social Structure.* Free Press

Meyvis, T., & Van Osselaer, S. M. J. (2018). Increasing the power of your study by increasing effect size. *Journal of Consumer Research, 44*, 1157-1174. https://doi.org/10.1093/jcr/ucx11

Miedaner, F., Kuntz, L. Enke, C., Rother, B., & Nitzsche, A. (2018). Exploring the differential impact of individual and organizational factors on organizational commitment of physicians and nurses. *BMC Health Services Research, 18*(180). https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-018-2977-1

Mohsen, M. A. M. S. (2016). Committed generations: A case study on generations X and Y employees in Saudi hotels. *Anatolia, 24*(4), 456-467. https://doi.org/10.1080/103032917.2016.1160416

Moore, J. M., Everly, M., & Bauer, R. (2016). Multigenerational challenges: Team building for positive clinical workforce outcomes. *The Online Journal of Issues in Nursing, 21*(2). https://doi.org/10.3912/OJIN.Vol21No02Man03

Mora, C., & Ticlau, T. (2012). Transformational leadership in the public sector: A pilot study using MLQ to evaluate leadership style in Cluj county local authorities.

Revista de Cercetare si Interventie Sociala, 36, 74-98. https://www.researchgate.net/publication/285918817_Transformational_leadership_in_the_public_sector_A_pilot_study_using_MLQ_to_evaluate_leadership_style_in_Cluj_county_local_authorities Mugizi, W., Bakkabulindi, F. E. K., & Ssempebwa, J. (2016). Validity and reliability of Allen and Meyer's (1990) measure of employee commitment in the context of academic staff n universities in Uganda. *Journal of Sociology and Education in Africa, 14*(1), 1-9. https://www.researchgate.net/publication/319501811_Validity_and_Reliability_of_Allen_and_Meyer's_1990_Measure_of_Employee_Commitment_in_the_Context_of_Academic_Staff_in_Universities_in_Uganda

Murale, V, Singh, J., & Preetha, R. (2015). Employee commitment and patient satisfaction: An initial reflection from Indian healthcare sector. *International Journal on Customer Relations, 3*(1), 215-226. https://doi.org/10.21863/ijcr/2015.3.1.004

Murray, D., & Chua, S. (2014). Differences in leadership styles and motives in men and women: How generational theory informs gender role congruity. *European Conference on Management, Leadership & Governance,* 192-199. https://www.proquest.com/docview/1674836177?pq-origsite=gscholar&fromopenview=true

Mustafa, G., Ilyas, M., & Rehman, A. (2016). Do the employees' job satisfaction interferes organizational culture and affective commitment relationship: Test of Boot strap mediation. *Journal of Applied Environmental Biological Sciences,*

6(5), 125-133. https://www.textroad.com/pdf/JAEBS/J.%20Appl.%20Environ.%20Biol.%20Sci.,%206(5)125-133,%202016.pdf

Myesigwa, R., Tusiime, I., & Ssekiziyivu, B. (2020). Leadership styles, job satisfaction and organizational commitment among academic staff in public universities. *Journal of Management Development, 39*(2), 253-268. https://doi.org/10.1108/JMD-02-2018-0055

Naim, M. F., & Lenka, U. (2018). Linking knowledge sharing, competency development, and affective commitment: Evidence from Indian Gen Y employees. *Journal of Knowledge Management; Kempston, 21*(4), 885-906. https://doi.org/10.1108/JKM-08-2016-0334

Neves, T., Graveto, J., Rogrigues, V., Maroco, J., & Parreira, P. (2018). Organizational commitment, psychometric qualities and invariance of the Meyer and Allen questionnaire for Portuguese nurses. *Revista Latino-Americana De Enfermagem, 26*, e3021. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6136528/#B8

Nurenda, A. M., & Asmoko, N. P. (2020). Work life balance and organizational commitment among Muslim Generation Y: The effect of Islamic work ethic. *International Journal of Psychosocial Rehabilitation, 24*(1), 1427-1438. https://doi.org/10.37200/1jpr/v24i1/pr200241

O'Hara, M. A., Burke, D., Dotomassi, M., & Palan, R. L. (2019). Assessment of Millennial nurses' job satisfaction and professional practice environment. *Journal*

of Nursing Administration, 49(9), 411-417. https://doi.org/10.1097/NNA.0000000000000777

Orgambidez, A., & Almeida, H. (2018). Predictors of organizational commitment in nursing: Results from Portugal. *Investigacion & Educacion en Enfermia, 36*(1), 151-159. https://doi.org/10.17533/udea.iee.v36n1e14

Pam, N. (2013). Leadership style. Psychology Dictionary. https://psychologydictionary.org/leadership-style/

Peng, S., Liao, Y., & Sun, R. (2020). The influence of transformational leadership on employees' affective organizational commitment in public and nonprofit organizations: A moderated mediation model. *Public Personnel Management, 49*(1), 29-56. https://doi.org/10.1177/00091026019835233

Pew Research Center. (2015, September 3). The whys and hows of generations research. https://www.people-press.org/2015/09/03/the-whys-and-hows-of-generations-research/

Pew Research Center. (2019, January 17). Defining generations: Where millennials end and generation z begins. https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/ft_19-01-17_generations_2019/

Poghosyan, L., & Bernhardt, J. (2018). Transformational leadership to promote nurse practitioner practice in primary care. *Journal of Nursing Management, 26*(8), 1066-1073. https://doi.org/10.1111/jonm.12636

Prathiba, S. C. S. Balakrishnan, L. (2017). Organizational citizenship behaviour of Gen Y's at workplace with special reference to private section banks in Chennai. *BVIMSR's Journal of Management Research: Mumbai, 9*(1), 66-75. https://www-proquest-com.ezp.waldenulibrary.org/docview/1912541339/fulltextPDF/53B51075A1004D26PQ/1?accountid=14872

Preston, B. (2010, July 23). *Sussing out patterns in American history.* https://www.lifecourse.com/media/articles/lib/2010/07232010.html?searched=saecu&advsearch=oneword&highlight=ajaxSearch_highlight+ajaxSearch_highlight1

Putri, S., Sjabadhyni, B., &Mustika, M. D. (2018). "Making generation Y stay": The mediating role of organizational commitment. *Psikohumaniora: Jurnal Penelitian Psikologi, 3*(2), 141-152. https://doi.org/10.21580/pjpp/v3i2.2513

Rasheed, K. P. M. A., & Johnson, B. (2017). Organizational commitment of mental health nurses in Kerala. *Anvesha, 10*(3), 33-42. https://ezp.waldenulibrary.org/login?qurl=https%3A%2F%2Fsearch.proquest.com%2Fdocview%2F2112125029%3Faccountid%3D14872

Rittschof, K. R. & Fortunato, V. J. (2016). The influence of transformational leadership and job burnout on child protective services case managers' commitment and intent to quit. *Journal of Social Service Research, 42*(3), 372-385. https://doi.org/10.1080/01488376.2015.1101047

Rofiqi, E., Nuritaszari, R. T., & Wiliyanarti, P. F. (2019). Factors affecting the organizational commitment of nurses in comprehensive health services: A

systematic review. *Journal Ners, 14*(3), 195-198. http://dx.doi.org/10.20473/jn.v14i3.17056

Saleem, A., & Naveed, S. (2017). Leadership and employee's reaction towards change: Role of leaders' personal attributes and transformational leadership. *Pakistan Administrative Review, 1*(1), 61-83. http://nbn-resolving.de/urn:nbn:de:0168-ssoar-51871-3

Salem, L. A., Baddar, F. M., & AL-Mugatti, H. M. (2017). Relationship between nurses' job satisfaction and organizational commitment. *Journal of Nursing and Health Science, 5*(1), 49-55. https://www.researchgate.net/publication/290434286_Relationship_between_Nurses_Job_Satisfaction_and_Organizational_Commitment

Santos, A. Chambel, M. J., & Castanheira, F. (2016). Relational job characteristics (and nurses' affective organizational commitment: The mediating role of work engagement. *Journal of Advanced Nursing, 72*(2), 294-305. https://doi.org/10.111/jan.12834

Sari, R., L. (2018). Komitmen organisasi pada dosen generasi Milenial. *Jurnal Penelitian Psikologi, 3*(2), 153-164. https://doaj.org/article/7aa06e2610e641989f2a4c43825751a7?

Sayadi, Y. (2016). The effect of dimensions of transformational, transactional, and non-leadership on the job satisfaction and organizational commitment of teachers in Iran. *Management in Education, 30*(2), 57-65. https://doi.org/10.1177/0892020615625363

Sersic, D. M. (1999). An empirical test of Meyer and Allen's three-component model of organizational commitment in a Croation context. *Review of Psychology, 6*(1-2), 17-24. https://hrcak.srce.hr/7577

Shacklock, K., & Brunetto, Y. (2011). The intention to continue nursing: Work variables affecting three nurse generations in Australia. *Journal of Advanced Nursing, 68*(1), 36-46. https://doi.org/10.1111/j.1365-2648.2011.05079.x

Society for Human Resource Management Foundation. (2017). *Harnessing the power of a multigenerational workforce*. https://www.shrm.org/foundation/ourwork/initiatives/the-aging-workforce/Lists/Curated%20source%20for%20page%20The%20Aging%20Workforce/Attachments/17/2017%20TL%20Executive%20Summary-FINAL.pdf

Siangchokyoo, N., Klinger, R. L., & Campion, E. D. (2020). Follower transformation as the linchpin of transformational leadership theory: A systematic review and future research agenda. *The Leadership Quarterly, 31*(1), 101341. https://doi.org/10.1016/j.leaqua.2019.101341

Singh, J., & Gupta, B. (2015). Job involvement, organizational commitment, professional commitment, and team commitment; A study of generational diversity. *Benchmarking, 22*(6), 1192-1211. https://doi:org/10.1108/BIJ-01-2014-0007

Smith, C. M., & Johnson, C. S. (2018). Preparing nurse leaders in nursing professional development: Theories applied to leadership in nursing professional development. *Journal for Nurses in Professional Development, January/February,* 38-40. https://doi:10.1097/NND.0000000000000404

Stevanin S., Palese, A., Bressan, V., Vehvilainen-Julkunen, K., & Kvist, T. (2018). Workplace-related generational characteristics of nurses: A mixed-method systematic review. *Journal of Advanced Nursing, 74*, 1245-1263. https://doi.org 10.1111/jan.13538

Stevanin, S., Voutilainen, A., Bressan, V., Vehvilainen-Julkunen, K., Rosolen,, V., & Kvist, T. (2020). Nurses' generational differences related to workplace and leadership in two European countries. *Western Journal of Nursing Research, 42*(1), 14-23. https://doi.org/10.1177/0193945919838604

Stewart, J. S., Oliver, E. G., Cravens, K. S., & Oishi, S. (2017). Managing millennials: Embracing generational differences. *Business Horizons, 60*(1), 45-54. https://doi.org/10.1016/j.bushor.2016.08.011

Strauss, M. E., Smith, G. T. (2009). Construct validity: Advances in theory and methodology. *Annual Review of Clinical Psychology, 27*(5), 1-25. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2739261/

Strauss, W., & Howe, N. (1991). *Generations: The history of America's future, 1584-2069.* William Morrow and Company, Inc.

Strauss, W. & Howe, N. (1997). *The Fourth Turning: An American prophecy.* Broadway Books.

Strauss, W., Howe, N., & Howe, I. (1993). *13th Gen: Abort, Retry, Ignore, Fail?* Knopf Doubleday.

Surucu, L., Maslakci, A., & Sesen, H. (2020). The role of positive psychological capital in the effect of leadership styles on organizational commitment: A study of

hospitality services. *African Journal of Hospitality, Tourism and Leisure, 9*(2), 1-16. https://www.ajhtl.com/uploads/7/1/6/3/7163688/article_4_vol_9_2__2020_cyprus.pdf

SurveyMonkey. (2020). Making responses anonymous. https://help.surveymonkey.com/articles/en_US/kb/How-do-I-make-surveys-anonymous

Tanabe, S., Yanagisawa, S., Waqa-Ledua, A., & Tukana, M. (2020). Community orientation scale among community health nurses in Fiji: Scale development and psychometric evaluation. *Nursing Open, 7*(5), 1367-1378. https://doi.org/10.1002/nop2.508

Torpey, E. (2018, April). Employment outlook for bachelor's-level occupations. *Career Outlook – U.S. Bureau of Labor Statistics*. https://www.bls.gov/careeroutlook/2018/article/bachelors-degree-outlook.htm#Healthcare%20and%20science

Turale, S., & Nantsupawt, A. (2021). Clinician mental health, nursing shortages and the COVID-19 pandemic: Crises within crises. *International Nursing Review, 68*(1), 12-14. https://pubmed.ncbi.nlm.nih.gov/33891772/

Tyczkowski, B., Vandenhoute, C., Reilly, J., Bansal, G., Kubsch, S., & Jakkola, R. (2015). Emotional intelligence (EI) and nursing leadership styles among nurse managers. *Nursing Administration Quarterly, 39*(2), 172-180. https://doi.org/10.1097/NAQ.0000000000000094

U.S. Bureau of Labor Statistics. (2021a, March 31). Occupational employment and wages, May 2020: 29-1141 registered nurses. https://www.bls.gov/oes/current/oes291141.htm

U.S. Bureau of Labor Statistics. (2021b, March 31). *Occupational employment and wages, May 2020: 29-2061 licensed practical and licensed vocational nurses*. https://www.bls.gov/oes/current/oes292061.htm

U.S. Census Bureau. (2020, February). *2017 national projections tables: Table 2. Projected age and sex composition of the population.* https://www.census.gov/data/tables/2017/demo/popproj/2017-summary-tables.html

U.S. Department of Health & Human Services. (n. d.). *Informed consent (FAQs).* https://www.hhs.gov/ohrp/regulations-and-policy/guidance/faq/informed-consent/index.html

U.S. Department of Health & Human Services, Health Resources and Services Administration, Bureau of Health Workforce, National Center for Health Workforce Analysis. (2019). *Brief summary results from the 2018 national sample survey of registered nurses*. https://data.hrsa.gov/DataDownload/NSSRN/GeneralPUF18/nssrn-summary-report.pdf

Vagharseyyedin, S. A. (2016). An integrative review of literature on determinants of nurses' organizational commitment. *Iranian Journal of Nursing and Midwifery Research, 21*(2), 107-117. https://doi.org/10.4103/1735-9066.178224

Vaismoradi, M., Griffiths, P., Turunen, H., & Jordan, S. (2016). Transformational leadership in nursing and medication safety education: A discussion paper. *Journal of Nursing Management, 24*, 970-980. https://doi.org/10.1111/jonm.12387

Volkova, N. V., Chiker, V.A., & Pochebut, L. G. (2019). Consolidation of the social capital among different generational cohorts: Organizational and subcultural facets. *Social Psychology and Society*, *10*(2), 127-145. https://doi.org/10.17759/sps.2019100210

Walden, J., Jung, E. H., & Westerman, Y. K. (2017). Employee communication, job engagement, and organizational commitment: A study of members of the Millennial generation. *Journal of Public Relations Research, 29*(2-3), 73-89. https://doi.org/10.1080/1062726X.2017.1329737

Walden University Center for Research Quality. (2020). *Red flag issues*. https://academicguides.waldenu.edu/research-center/research-ethics/red-flags

Warner, R. M. (2013). *Applied statistics: From bivariate through multivariate techniques* (2nd ed.). Sage.

Wei, F., Lee, J., & Kwan, H. K. (2016). Impact of active constructive leadership and passive corrective leadership on collective organizational commitment. *Leadership & Organization Development Journal*, *37*(7), 822-842. https://doi.org/10.1108/LODJ-08-2014-0150

Woodward, I. C., Vongswasdi, P., & More, E. A. (2015). Generational diversity at work: A systematic review of the research. *INSEAD, Working Paper Series, 48*, 1-71. http://ssrn.com/abstract=2630650

Xu, L., Bassham, L. S. (2010). Reexamination of factor structure and psychometric properties of the three-component model of organizational commitment. *North American Journal of Psychology, 12*(2), 297-311. https://www.researchgate.net/publication/280730944_

Yang, B., & Wei, F. (2019). *The influence of inclusive leadership on the active behavior of new generation employees: A regulated mediation model.* 2019 International Conference on Economic Management and Model Engineering. https://doi.org/10.1109/ICEMME49371.2019.00120

Yurumezoglu, H. A., Kocaman, G., & Haydari, S. M. (2019). Predicting nurses' organizational and professional turnover intentions. *Japan Journal of Nursing Science, 16*, 274-285. https://onlinelibrary.wiley.com/doi/epdf/10.1111/jjns.12236

Appendix A: Screening Questions

The screening questions were provided to volunteers once the electronic informed consent is signed. Any responses that affirm an exclusion criterion has been met, will end the survey.

1. Are you 18 years of age or older?
2. Were your born between 1928 and 2012?
3. Do you possess an LPN, LVN, or RN license?
4. Do you work primarily in any of these units: critical care, emergency department, labor and delivery, medical/surgical, mental health, pediatrics, surgical services, and urgent care?
5. Is at least 50% of your workday dedicated to providing clinical services to patients and their families?
6. In your current role, are you assigned a formal title of Supervisor, Manager, Director, Administrator, or member of the C Suite (Chief Nursing Officer, Chief Executive Officer, Chief Financial Officer, Chief Operating Officer, or Chief Information Officer, etc.).

Appendix B: Demographic Question

There was one demographic question for the survey. The question and potential responses are provided below.

I was born between (select one):

A. 1928 – 1945

B. 1946 – 1964

C. 1965 – 1980

D. 1981 – 1996

E. 1997 – 2012

Appendix C: Recruitment Flyer

Seeking Nurses to Participate in an Online Survey Study

Principal Investigator: Kim Hedley
PhD, Nursing Student at Walden University

Purpose: The purpose of this research is to explore the combined effects of generational cohort and leadership style on nurses' organizational commitment.

Participants must:

- Be 18 years old or older
- Be born between 1928 and 2012
- Possess an LPN, LVN, or RN license
- Work in the acute care setting with at least 50% of the workday dedicated to providing clinical services to patients and families.

About the Study:

- Participants will complete one 20 – 30-minute online survey.
- No identifying (name, phone number, place of residence, email address, or IP address) information will be collected on participants.

Recruitment Letter: A recruitment letter to participate in the study will be sent to nurses via email within the next two weeks.

Contact Information:

Kim Hedley
(email address)

Appendix D: Hospital Recruitment Letter

Hello,

My name is Kim Hedley and I am a PhD in Nursing student at Walden University. As part of my doctoral dissertation, I am conducting a research study to explore the combined effects of generational cohort and leadership style on nurses' organizational commitment. I am recruiting nurses, who are at least 18 years of age, born between 1928 and 2012, work in the acute care setting, and dedicate at least 50% of the workday to providing clinical services to patients and their families.

Participation in the study will take approximately 20 - 30 minutes and will include the following:

- Review and electronic signature of the consent form.
- Review and response to screening questions.
- Completion of a 64-item online survey that includes one multiple choice item and 63 items with responses using a scale.

Participation is voluntary and there are no consequences for choosing not to participate or withdrawing from the study. Participants may refuse to answer any or all the questions and may exit the survey at any time without penalty. Confidentiality of all participants will be maintained. The data will be kept secure and password protected. Results of the study will be presented in the aggregate, and there will be no identifying information for participants. You may share the recruitment letter with other nurses outside your organization.

To begin the survey, click on this link, to access the consent form. If you agree to the consent form, you will receive six screening questions. Your responses will determine if you will receive access to the survey.

I appreciate your willingness to consider participating in the study. Any additional questions regarding the study can be directed to me, Kim Hedley, at (email address).

Sincerely,

Kim Hedley

Kim Hedley, PhD(c), MS, RN, CPHQ
PhD, Nursing Student
Walden University

Appendix E: Hospital Reminder Email

Hello,

This email is a reminder regarding the email sent on (date) inviting you to participate in in my research study to explore the combined effects of generational cohort and leadership style on nurses' organizational commitment. If you have already completed the survey, thank you. If you have not, please review the email sent on (date) and consider participating in the survey.

I appreciate your willingness to consider participating in the study. Any additional questions regarding the study can be directed to me, Kim Hedley, at (email address)

Sincerely,

Kim Hedley

Kim Hedley, PhD(c), MS, RN, CPHQ
PhD, Nursing Student
Walden University

Appendix F: LinkedIn and Nursing Organizations Recruitment Letter

Hello,

My name is Kim Hedley and I am a PhD in Nursing student at Walden University. As part of my doctoral dissertation, I am conducting a research study to explore the combined effects of generational cohort and leadership style on nurses' organizational commitment. I am recruiting RNs, LPNs, and LVNs who work in a non-administrative position, who are at least 18 years of age, born between 1928 and 2012, work in the acute care setting, dedicate at least 50% of the workday to providing clinical services to patients and their families, and are able to read and write in English, to participate in the study.

Participation in the study will take approximately 45 minutes and will include the following:

- review and electronic signature of the consent form.
- review and respond to screening questions.
- complete the 64-item online survey that includes one multiple choice item and 63 items with responses using a scale.

Participation is voluntary and there are no consequences for choosing not to participate or withdrawing from the study. Participants may refuse to answer any or all the questions and may exit the survey at any time without penalty. Confidentiality of all participants will be maintained. The data will be kept secure and password protected. Results of the study will be presented in the aggregate, and there will be no identifying information for participants. **You may share the recruitment letter with other nurses outside your organization.**

To begin the survey, **click on this link**, to access the consent form. If you agree to the consent form, you will receive six screening questions. Your responses will determine if you will receive access to the survey.

I appreciate your willingness to consider participating in the study. The aggregate results will be posted at (link) xxxand copies of the results will be available at the participating hospitals. Any additional questions regarding the study can be directed to me, Kim Hedley, at (email address). The aggregate results will be available in a dropbox folder using the code upon completion of the study.

Sincerely,

Kim Hedley

Kim Hedley, PhD(c), MS, RN, CPHQ
PhD Nursing Student
Walden University

Appendix G: Florida Health Portal Recruitment Letter

Hello,

My name is Kim Hedley and I am a PhD in Nursing student at Walden University. As part of my doctoral dissertation, I am conducting a research study to explore the combined effects of generational cohort and leadership style on nurses' organizational commitment. I am recruiting RNs, LPNs, and LVNs who work in a non-administrative position, who are at least 18 years of age, born between 1928 and 2012, work in the acute care setting, dedicate at least 50% of the workday to providing clinical services to patients and their families, and are able to read and write in English, to participate in the study.

Participation in the study will take approximately 25 minutes and will include the following:

- review and electronic signature of the consent form.
- review and respond to screening questions.
- complete the 64-item online survey that includes one multiple choice item and 63 items with responses using a scale.

Participation is voluntary and there are no consequences for choosing not to participate or withdrawing from the study. Participants may refuse to answer any or all the questions and may exit the survey at any time without penalty. Confidentiality of all participants will be maintained. The data will be kept secure and password protected. Results of the study will be presented in the aggregate, and there will be no identifying information for participants. **You may share the recruitment letter with other nurses outside your organization.**

To begin the survey, **click on this link**, to access the consent form. If you agree to the consent form, you will receive six screening questions. Your responses will determine if you will receive access to the survey.

I appreciate your willingness to consider participating in the study. Any additional questions regarding the study can be directed to me, Kim Hedley, at (email address) The aggregate results will be available in a dropbox folder upon completion of the study.

Sincerely,

Kim Hedley

Kim Hedley, PhD(c), MS, RN, CPHQ
PhD Nursing Student
Walden University

Appendix H: Permission to Use the Multifactor Leadership Questionnaire

For use by Kim Hedley only. Received from Mind Garden, Inc. on September 13, 2020

mind garden

www.mindgarden.com

To Whom It May Concern,

The above-named person has made a license purchase from Mind Garden, Inc. and has permission to administer the following copyrighted instrument up to that quantity purchased:

Multifactor Leadership Questionnaire

The three sample items only from this instrument as specified below may be included in your thesis or dissertation. Any other use must receive prior written permission from Mind Garden. The entire instrument may not be included or reproduced at any time in any other published material. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

Citation of the instrument must include the applicable copyright statement listed below.
Sample Items:

As a leader ....

I talk optimistically about the future.
I spend time teaching and coaching.
I avoid making decisions.

The person I am rating....

Talks optimistically about the future.
Spends time teaching and coaching.
Avoids making decisions

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Published by Mind Garden, Inc. www.mindgarden.com

Sincerely,

Robert Most
Mind Garden, Inc.
www.mindgarden.com

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Appendix I: Permission to Use the TCM Employee Commitment Survey

Below is the email exchange with Dr. Meyer seeking approval to use the Three-Component Model (TCM) Employee Commitment Survey

Re: Seeking permission to use AC, NC, and CC scales
Kim Hedley
Fri 7/17/2020 1:22 PM
To: John Peter Meyer
Hello Dr. Meyer,

I appreciate your quick response and look forward to using the scales.

All the best,

Kim

Kim Hedley, MS, RN, CPHQ
PhD, Nursing Student
School of Health Sciences

From: John Peter Meyer
Sent: Thursday, July 16, 2020 3:25 PM
To: Kim Hedley
Subject: RE: Seeking permission to use AC, NC, and CC scales

Dear Kim,

Thank you for your interest in using the Three-Component Model (TCM) Employee Commitment Survey in your research. You can get information about the measure, a Users' Guide, and the measure itself at:

(web address)

For academic / research purposes, please choose the Academic Package. (There is no charge for this package.)

I wish you well with your research!

Best regards,
John Meyer

From: Kim Hedley
Sent: July-16-20 1:37 PM
To: John Peter Meyer
Subject: Seeking permission to use AC, NC, and CC scales

Hello Dr. Meyer,

I hope this message finds you well.

My name is Kim Hedley and I am a PhD in Nursing (Leadership) student at Walden University and am writing to seek your permission to use Affective Commitment Scale, Normative Commitment Scale, and Continuous Commitment scale in my survey tool. I plan to study the combined effects of generation and leadership styles on acute care nurses' organizational commitment and feel the scales will provide the needed information for my study.

I look forward to hearing from you.

Sincerely,

Kim Hedley, MS, RN, CPHQ
PhD, Nursing Student
School of Health Sciences